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ABSTRACT

This collection of papers by various authors focuses on the following topics: (1) educational change and implications for the principal, (2) resource acquisition and allocation, (3) evaluation and the principal, (4) goal-oriented evaluation, (5) teacher preparation, and (6) current and future problems of Alberta school principals. (LLR)

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# THE PRINCIPAL'S ROLE
# IN THE 70's

## *THE LECTURE SERIES*

of

## THE 1970 LEADERSHIP COURSE FOR SCHOOL PRINCIPALS

Edited by
J. J. BERGEN and N. J. CHAMCHUK

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THE POLICY COMMITTEE, LEADERSHIP COURSE FOR SCHOOL PRINCIPALS
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# FOREWORD

At the end of a decade it appears customary to review the events of the preceding ten years, and to envision changes that may occur in the next decade. A number of illustrations can be advanced to illustrate this—what is generally conceded to be—productive activity. The theme of the Western Canada Educational Administrators' Conference, held in October, 1969, was *Designs for the Seventies: An Administrative Perspective.* The theme for the October, 1970, Conference was *Revolution to Resolution: New Directions for the '70's.* The theme for the Canadian Education Association Short Course in Educational Leadership (Banff, May 1970) also was *Designs for the '70's,* and that of the Association's annual convention theme (September, 1970) was *Education at the Threshold of the '70's.*

There is, therefore, nothing unique about the theme of the 1970 Leadership Course for School Principals—*The Principal's Role in the '70's.* Nevertheless, it is quite conceivable that during the decade of the 70's more change may take place in Alberta's schools than has taken place during the last two or three decades. It is also conceivable that the recommendations of the Alberta Commission on Educational Planning may have a profound impact upon schools within the province. Hence, a major purpose of the lecture series was to focus attention upon actual and predicted change and upon related challenges for the school principal.

A series of questions related to the role of the principal demanded attention. Is the role of the principal changing from that which it has been perceived to be? Will the principal survive as a functionary in the schools? If so, what ought to be his role in the elementary and secondary schools of the future? What part can he play in the acquisition and allocation of resources for and within his school? What kinds of evaluation functions must he perform? What leadership role must he assume in relation to teachers and the community which supports the school? What kind of preparation will the new teachers have, and how will the principal optimize the potential of their contribution? What are some of the major problems with which principals must grapple in their efforts to facilitate the development of effective and efficient learning environments?

The papers in this publication constitute an attempt to come to grips with these and many other issues stemming from the actual and anticipated changes within the educational setting. They focus on the role of the school principal for the next decade.

J. J. Bergen, Course Director

# ACKNOWLEDGEMENTS

The success of the Leadership Courses for School Principals depends upon the interests and efforts of all who are involved: sponsors, leadership personnel, and of course participants. Special mention must be made of the members of the Policy Committee and the organizations which they represent.

An interesting and though-provoking series of lectures was presented by the following:

*Mr. F. X. Bischoff, Principal of the Cartier-McGee//Louis St. Laurent Campus*
*Mr. E. H. Bliss, Assistant Superintendent of Curriculum Development for the Edmonton Public School Board*
*Dr. C. S. Bumbarger, Associate Professor of Educational Administration*
*Dr. H. T. Coutts, Dean of the Faculty of Education*
*Dr. N. L. Hersom, Associate Professor of Elementary Education*
*Dr. M. Horowitz, Professor and Chairman of the Department of Elementary Education*
*Dr. W. D. Knill, Professor of Educational Administration*
*Dr. T. O. Maguire, Associate Professor of Educational Psychology*
*Dr. F. C. Thiemann, Associate Professor of Educational Administration*
*Dr. K. A. Wilson, Graduate of the Department of Educational Administration*

With the exception of Mr. Bischoff, Mr. Bliss, and Dr. Wilson, all lecturers were faculty members of The University of Alberta. Dr. Wilson has returned to Tasmania, Australia, where he holds a position with the Department of Education. Also, Dr. Thiemann has returned to the University of Oregon.

Group discussions on the lecture series and other group activities were under the direction of the following consultants:

*Mr. J. A. Bacon, Ph.D. Student in Educational Administration*
*Mr. K. W. Bride, Executive Assistant, The Alberta Teachers' Association*
*Dr. D. A. Girard, Executive Director, The Alberta School Trustees' Association*
*Mr. G. W. Wallis, Superintendent of Schools, County of Vermilion River*
*Mr. F. M. Riddle, Superintendent of Schools, Medicine Hat School District*

An interesting and worthwhile contribution was made by the members of a panel who gave their perceptions with respect to some typical problems principals must grapple with in the course of performing their individual roles. Panel members were: school trustees, Mrs. Jean McDonald (Edmonton Separate) and Mr. Paul Chomay (Thorhild); parents, Mrs. J. P. Gillese and Dr. Milton Bauer, (Edmonton Home and School Association members); teachers, Mrs. Velma Lancaster (Sacred Heart School) and Mr. Ralph Evans (Jasper Place Composite); and students, Jim Lust (Avalon Junior High), Roman Scharabun (St. Joseph's High), and Paul Bergen (Strathcona High).

Special thanks are due to *Mr. N. J. Chamchuk,* Ph.D. student in the Department of Educational Administration, for his capable assistance as Assistant Director of the Course. Mr. Chamchuk added to the content and interest of the Course by conducting a Delphi study of problems in education and by arranging for the video-taping of Course sessions. Efficient service was also provided by *Miss Joan Zowtuk,* who assisted as Course secretary, and other members of the clerical staff of the Department of Educational Administration.

The services of the Edmonton public and separate school systems is also acknowledged. Course participants were able to visit schools of their choice. The Leadership Course was accommodated in the Alberta School for the Deaf. The services of the staff of the School, and the arrangements made by Mr. F. G. Cartwright, Superintendent, were much appreciated. Mr. Cartwright also conducted an evening tour of the school, and gave Course members some illustrations about the nature of educating hearing-handicapped children.

The fifteenth consecutive Leadership Course was attended by *sixty-four* principals and vice-principals. All but two of these came from the breadth and length of the province. One came from the Yukon Territory and one from the North West Territories. With the exception of one member who paid his own fee and one who was sponsored by the Alberta Teachers' Association, Course members were nominated and sponsored by their respective school boards. It appears that, over these many years, school boards have continued to conclude that the cost of sending principals to the Leadership Course is an investment bearing dividends in terms of more enlightened leadership within their schools. The contribution made by school boards in making this singular opportunity available to their administrators is most significant.

# A DARING VISION—SCHOOLS IN 1980

or

# A MATTER OF SURVIVAL*

**WILLIAM D. KNILL**

> "The future is an opaque mirror. Anyone who tries to look into it sees nothing but the dim outlines of an old and worried face." Jim Bishop, *New York Journal American.*

This forecast has been in preparation for twenty-five years. Although I must admit that after spending three weeks in the library where I attempted to read everything obtainable on schools of the future, nothing seemed to reinforce fully my own prophetic powers, and few writers seemed to strike a note sympathetic with my own apprehensive attitudes.

If I am going to envision, daringly, the situation of public education and the schools of Alberta to a select group of practising administrators just one week removed from their own schools, I have to rely on something more than the literature on educational futures. A quarter century in and out of the schools of this province has probably not sharpened my intuition or my predictive talents. However, as I look back and see how unsuccessful anyone else has been in forecasting the role of education and the schools of 1970, I am duly humble and fully aware that we are likely to be no more accurate in forecasting the 1980's or 1990's.

You know, it wasn't so very long ago—at least to educators such as myself—that the visionary John W. Barnett was barnstorming throughout Alberta in his old Model T Ford, promising the teachers that if they would support him in changing the Alberta Teachers' Association, it wouldn't be long before they would be paid $1500 a year. Then teaching would become a respectable profession. (Thus, doing a very simple linear extrapolation from this point in time permits me to predict that by 1980 the senior classroom teacher of Alberta will be earning almost $26,000 per year and principals of small schools over $30,000.)

We are warned that those who do not study history intelligently are condemned to repeat it. This is why I am going to rely somewhat on my past experiences and observations in order to temper my "daring" speculations—for it is also true that the past is but prologue. However, I do not mean to use the predictive technique termed "establishment futurology" whereby present dominant trends are simply projected into the future. This procedure results in predicting a future world which is just more of the "gee whiz technology" we have today. There is too much indeterminancy in our world to permit that. However, whatever the future holds for education, I am sure that it will be characterized by seething unrest, scarce resources and greater confusion.

Permit me to range far and wide on the topic of schools because the articles to follow will each develop specific areas in detail. The authors' projections into the future may not be so speculative although I doubt if they can present any "hard data" to support their positions, either. I would like to discuss the current conditions of society and our nation, and implications for education. Then I shall discuss provincial education commissions, some anticipated trends in education, and militancy and protest in schools. From all this I shall attempt to see what the implications may be for school administrators in the decade ahead.

## I. THE SOCIAL MILIEU

> "More and more, 20th Century man crouches like an old woman on her stoop, pointing her rusty shot gun at the oncoming expressway, knowing all the time that in the end the bulldozers will go through." Tom Wicker, *The New York Times.*

"Will there be a future?" is the first valid question one can pose before beginning a discussion on the future. Educators, on the whole, are incurable optimists—otherwise why else would they be educators? This blind faith in the improvement and perfection of men and society through the process of education has carried the Western world to its present stage of development. Increasing numbers of people are questioning the precarious position to which Western man has "progressed"—the possibility of immediate nuclear annihilation, or a slower demise through pollution and the ecological destruction of the biosphere.

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*This address was introduced by the National Film Board film, "A Matter of Survival" which deals with the ethical, organizational and administrative problems of technological unemployment caused by "computerization" of industry.

And it may take only a decade. Secretary General U Thant of the United Nations has stated that ten years is the amount of time the U.N. has left, either to become an effective force for world peace or to disintegrate. Lester B. Pearson, as chairman of an international committee, has just recently studied the chances of human survival and he has written:

> . . . human existence on this planet is in jeopardy. We see a world in which human population is increasing at a rate that will strain to the breaking point the ability of the earth to sustain human beings in dignity, welfare and freedom . . . We see wars . . . the blight of racial discrimination . . . escalating arms race . . . a deteriorating human environment . . . .
> We see youth protesting a world in which they feel they may have no future, a world in which nations exempt themselves from the orderly and rational behaviour they demand of their citizens, a world in which an accident or miscalculation could obliterate civilization and make a farce out of human evolution, a world in which force is immediate and total injustice is indefinite and partial. (Pearson, 1970: 24)

These bleak and discouraging forecasts cannot be ignored but few specific and concrete solutions seem to be forthcoming at the present time. However, those who have considered these vast problems of mankind have, in almost every instance, seen education as the most promising way out of our dilema. In the next decade we can anticipate even greater blind faith placed in the potential effectiveness of education to solve man's social, economic and political problems.

As an example of the kind of creative thinking which has been turned to this problem of global survival, I refer to the work of Buckminster Fuller, one of the most creative thinkers of our time. He states that the world can work for its inhabitants if we turn our real wealth, the physical and mental energy of people, to solving the problem. In his recent book, *Operating Manual for Spaceship Earth,* his suggestion is:

> . . . to give each human who is or becomes unemployed a life fellowship in research and development or in just simple thinking . . . For every 100,000 employed in research and development, or in just plain thinking, one probably will make a break-through that will more than pay for the other 99,000 fellowships. Thus production will no longer be impeded by humans trying to do what machines can do better. (Taylor, 1970: 57)

And, eventually, man will be free to spend all his waking hours in whatever kinds of experience he chooses to invest himself.

*Complexity* will be the result of expanding world population and increasing urbanization, a greater demand for full recognition of minority groups representing race, age, and sex, overwhelming information poured in by mass media and, finally, complexity caused by the unanticipated impacts of new, developing, powerful technologies.

*Turmoil* will result from complexity, and from malfunctioning in the social and physical environment. Turmoil will also result in the political sector as the basic structures of our governments come under attack from greater demands to provide all the necessities of life.

*Scarcity* of skilled manpower and scarcity of time needed to cope with the problems will also characterize the next decade or two. Not only will there be a need for highly skilled people in the technical sense, but "people skilled in being humans: in warmth and trust, openness and compassion, in being non-manipulative and non-exploitive." These are the people who will be scarce for, "if we wanted them tomorrow, we should have been training them in numbers yesterday." (Michael, 1968: 34-5)

He also sees the ultimate hope resting in the educational process, but he is pessimistic about the prospect of our present public education system adapting itself rapidly to the needs of the future society.

One major hindrance will be acquiring teachers with values appropriate to tomorrow's world. For the next decade our schools will continue to be staffed with teachers who stress lower-middle-class values of good behaviour, conforming, political conservatism, nationalism and resistance to alternative life styles. They will not stress commitment "to tasks, craftmanship, independence, integrity, spontaneity, wideranging social and cultural tolerance and experiment, and attitudes encouraging the expectations of occupational changes. Thus, to considerable extent, the debate is likely to be an abstract one for most schools and students for many years." (Michael, 1965: 108)

Michael cannot see how the public school system can cope with the problem of educating the kind of people needed to solve these emerging problems. He, therefore, proposes a platonic approach concentrating resources on educating an elite who can attack the social, economic and political problems and come up with the necessary solutions. The kind of teachers needed for these selected students should:

> . . . discard the role of the passive, neutral person who separates teaching from other roles of citizen and private person, or worse, who has no role as citizen. Instead, teachers must fuse these roles. They must be among the students' most impressive lessons in living and they must be so by doing so. If a teacher is involved in unionizing activities, or protesting Vietnam, or scuba-diving, or practising yoga, or is fascinated with LSD or the new theologies, these should all be evident to the students . . . The teacher per se, as a person, should be the shape of living in tomorrow at least as much as any representation of mooncraft or computer. (Michael, 1968: 120-121)

Does the suggestion for the use of LSD startle you? When this suggestion was made by Michael in 1968 it was censored from his published address. But ideas advance quickly today, and just last month the same suggestion was seriously put forth to a conference of Canadian school superintendents who were told:

> Try hallucinogenic drugs. Perhaps through them you will get an insight into the incredible waste of human potential within yourself. Try to conceptualize a new you and a new world. (Stein, 1970)

Here then is the cutting edge of a social movement toward what may become a drug culture. Principals should be prepared to discuss and act upon such future school issues as *what* can be smoked in school smoking rooms, and not just whether smoking rooms *should* be provided. Principals may be concerned with planning future school buildings with a new facility that may be designated the Freaking-Out Room or Freaking Pad. The move toward the acceptance of "the drug fact" has become further substantiated by the LeDain interim report which, with its recommendations of a policy of leniency, states, ". . . We believe that the emphasis must shift . . . from a reliance on suppression to a reliance on the wise exercise of freedom of choice." Clearly, this statement implies the involvement of schools in drug education programs.

## II. THE NATIONAL EDUCATION SCENE

Leaving the broader spectrum of society and some of the societal shifts which may hold implications for education and the schools, I would like to move to the national level of education and speculate what might be the role of the federal government in education. The past decade held a few moments of high hope that the education of all Canadian youth was a national concern, and that the federal government should take an active and direct part in providing equality of educational opportunity. Direct financial aid to the provinces for educational purposes, and a federal office of education to facilitate and co-ordinate inter-provincial co-operation were two immediate possibilities, but neither was achieved. Section 93 of the BNA Act is held inviolable—or apparently is accepted as such when it is convenient to preserve provincial rights and autonomy. (Knill, 1970: 188)

In spite of the worsening financial crisis facing Canadian schools and the general admission that local property is an insufficient base for taxation for school support, it does not appear probable that the federal government is prepared to open up new revenue sources. One forecast of the role of the federal government in public education comes from the Executive Secretary of the Canadian Education Association:

> The Canadian Government will continue to make forays into education as some national need (vocational education, ETV, bilingualism) or political expediency justifies the venture, and will as suddenly retreat; the provincial authorities will clear up the debris and make do with leftovers from the raid. National planning, involving broad study and careful consultation will, as in the past, be regarded as unnecessary and un-Canadian though billions of dollars are involved in educational expenditure. (Stewart, 1970)

This is hardly a daring forecast for the 1970's, but it is probably accurate, for the federal government is the best example of the old saw: the more things change, the more they remain the same. At the national level we cannot expect much dynamic leadership in education by 1980.

## III. THE PROVINCIAL LEVEL

280. That a competent and authoritative body to be known as the Alberta Educational Planning commission be estab-

> lished by Act of the Legislature at the earliest opportunity. (Cameron report, 1959.)

New developments in education may occur sporadically in some of the provinces at the provincial and local level and the schools of 1980 may be determined by three major forces: (1) government commissions and legislation, (2) teacher militancy and (3) student protest.

This may very well be the era of the education commission since the past decade opened and closed with a spate of royal commissions. Most recently Ontario has heard the results from the Hall-Dennis commission and the report has generated much discussion in that province. Closer to home the Alberta Commission on Educational Planning is busy at work on a three-year assignment with very broad terms of reference. It has been suggested that:

> History is rich in evidence that men would rather talk than act, and wise governments have furnished them with institutions to accommodate this inclination. The ancient Athenians devised the ecclesia, or popular thoughts without necessarily getting any action on them. The Senate of Imperial Rome was another forum where words loomed larger than deeds. (*Time,* 1970)

Today it is the *commission* where, if a problem cannot be solved, at least it can be talked to death. Commissions are purely political institutions and one purpose they may have is to "buy time" for the government which can forestall making decisions until the final commission report. Even then, the reports are shelved more often than not. Commissions, however, are a good exercise in "participatory democracy" although those who are appointed to them are seldom representative of the general population but rather an elite. It requires considerable skill to appoint a representative group to a commission, and in this respect the Alberta Commission is somewhat significantly lacking female representation — a point the feminist movement has not overlooked. It has also been suggested that commissions "In arousing hopes they cannot fulfil, contribute to a further erosion of confidence in democratic institutions—at a time when they [the institutions] are already facing criticism." (*Time,* 1970) At the present time when our schools are coming under severe and often irrational criticisms, can a commission report come up with concrete recommendations, which if they are fully implemented, will turn away public wrath?

The *Hall-Dennis Report* might be examined as a prophetic document for our own province. Someone once observed that Canada was made up of nine provinces and an educational laboratory — although that may be less true today than three decades ago. I must agree with one prominent educator who observed that it took Dennis and Hall thirty years to discover Alberta. The 258 recommendations do not project an image of the future school in our Province, but rather give one a feeling of *déjà vue.*

The three specific recommendations dealing with the role of the principal and directed to the school boards for action are:

1. Develop the principalship to the point where the principal is free from administrative detail and is encouraged to function as a consultant, advisor, co-ordinator, and counsellor for all elements of his school.
2. Encourage the principal to contribute to the development of school board policy and to serve as an educator in the broadest philosophical sense.
3. Provide learning opportunities for the principal which will take him to other schools and systems, and to other community agencies.

If these three recommendations give you the impression that the future of the principalship is somewhat precarious, I can add that of the 250 recommendations not one is directed specifically for action by the principals. The Report has one page devoted to "the principal and the School" and concludes with the statement:

> . . . the responsibility for principalship might be re-examined in favor of other forms of leadership. The 'captain of the ship' description so frequently applied to principals may well be made obsolete by the use of team leadership, wherein a teacher team assumes the role of the principalship in a school.

Contrary to the positions taken in the papers appearing in this publication, the *Hall-Dennis Report* certainly questions whether the role of the principal has much future.

The *Alberta Commission on Educational Planning* will probably deal with the role of the principal in tomorrow's schools. We shall anticipate the outcome of the Commission's deliberations, the suggested alternative plans, and specific recommendations. It will at least attain a "blue chip consensus" about the direction Alberta schools of the future should take, but briefs and suggestions submitted so far have not been of an extremely radical nature. Frequency of mention at the hearings and in the press would make the following educational changes a distinct possibility within the next decade or two, illustrating that future education will be characterized by increasing complexity of problems, internal and external turmoil, and scarcity of human and financial resources.

1. Even a greater share of financing education will be shifted from the local property base to the provincial level. The most obvious and immediate source of revenue will be a provincial sales tax followed by a serious attempt to tap the income tax field. The continued shift of financial control of education into the hands of the central government, which is now well underway as indicated by the new Alberta School Act, will have the obvious implication that "he who pays the piper calls the tune." A positive outcome of this might be the continuing equalizing of educational opportunity throughout the Province.

2. The trend toward urbanization in Alberta will continue, and quality of education in urban centres will continue to outstrip that in rural areas. The demand for better educational facilities in small centres has been a common theme running through rural submissions to the Commission, and often justified on the basis that education is the chief industry of the communities and desperately needed to keep the communities viable.

The larger urban centres will offer broader, more innovative programs with better co-ordinations, and some evidence of *Program Planning and Budget Systems* (PPBS) will become apparent. However, PPBS will not prove to be the panacea that many expect. Value judgments and priorities must be made and PPBS will not remove this responsibility from educational decision-makers who will continue to balk and remain ill-prepared to make long-range decisions. (Atherton, 1970; Finnman and Knill).

The larger urban centres will soon be entertaining serious thoughts about decentralizing much of the school operations to sub-units (possibly experimental campus units ) throughout the cities and even decentralizing to the school level in the areas of instructional program, staff utilization and some aspects of the budget.

3. The extension of educational programs both downward to the kindergarten and pre-school level, and upward to the post-secondary level is so badly overdue that these must be undertaken in the near future out of sheer necessity. The province has disregarded the need for pre-school programs for years, and keeps hoping that some day we can "afford" kindergartens and nursery schools. The research findings now available showing the social and educational need for these programs can hardly be ignored. I would hazard a guess that *Request for Proposals* (R.F.P) procedures may be seriously considered for initiating such programs. (Manning, 1970: 46)

The upward extension to secondary and post-secondary programs will occur by necessity because of population growth. Statistical projections show that, in Canada, full-time post-secondary enrolment will increase from 490,000 in 1969-70 to 1,130,000 in 1980-81. (Zigmond & Wenaas, 1970) Enrolments will feel the effects of the high birth rate of the 1950's and early 1960's. However, the more significant factor will be substantial increase in the proportion of young people enrolling at the post-secondary level. This year the proportion was around 19 per cent for the 18-24 year age group. By 1980-81 it is projected to be 33 per cent, and the secondary level of education in Canada will have replaced elementary education as the universal standard. One result of this shift should be a closer integration of all educational services from kindergartens to college.

4. The demand for community schools is a recurring theme, and we can expect to see "lighted school houses" throughout this province in the next decade. As in other matters educational, the American move to fuller community use of school facilities is already underway and the concept is quickly catching on in this country. Justification in terms of community need, continuing education, and re-education for adults should be sufficient, although the more persuasive argument continues to be financial through greater utilization of expensive capital investments in plant facilities. For principals who see themselves in the role of building managers, this development will keep them well occupied.

Generally, we can expect the schools to operate longer days, longer school years, on semester and quarter year plans, with flexible scheduling and greater variety of programs. (Wallin, 1970: 21-8)

5. From many sources there is a demand for "humanizing" and "personalizing" education, and inasmuch as schools do accommodate public demands, the schools of the future must be more "humane" or "per-

sonal." There may be several reasons for feeling that schools are becoming more dehumanized and demeaning. Larger schools, more bureaucratized school systems, technological developments in instruction and a curriculum which is perceived by students to be increasingly irrelevant may account for this growing anxiety that schools are ignoring individuals. The social critics of education have made much of this, and they are gaining increasing support. American school systems seem less and less effective in coping with that nation's social problems. These criticisms of American schools echo throughout Canada and, indeed, we even import the critics into Canada in order to hear them better. (Bowers, Housego & Dyke, 1970)

One brief description of learning thirty years hence may illustrate what is hoped for in a "humane school":

> . . . We have to face it, Johnny, people actually could and did read about or see movies about brutal killings and senseless destruction without most of the relevant human feelings. . . . *They were uneducated.* It's as simple as that. You know, Johnny, until very recently, education was mostly nothing more than the 'teaching' of facts and concepts. Even as late as the 1960's, people could go completely through school and remain what might be called, in the words of those days, not only emotional imbeciles, but sensory ignoramuses and somatic dumbbells. . . (Leonard, 1968: 173)

This prediction is from *Education and Ecstasy,* a book which is currently on the "must read" list of most educators. What is more significant, however, is that the educational programs proposed here are based upon sensitivity training and the Esalen Institute approach. The increasing interest in sensitivity training for educators has not crested yet. A decade hence it will be no surprise to me if the 1980 Principals' leadership Course will be two weeks of encounter groups, sensitivity training and human relations training. It is claimed that:

> . . . human relations training is capable, if properly employed, of producing substantial educational change. It holds tremendous potential for improving education by dealing with its affective components, reducing the unnecessary friction between generations, and creating a revolution in instruction by helping teachers to learn to use the classroom group for learning purposes. (Birnbaum, 1969: 82)

But school systems now infatuated with training will have to learn, as industry has, that not all sorts of training are functional for all personnel.

## IV. MILITANCY AND PROTEST

"... we can take a cue from the young who seem to want instant utopias. They say the future is now." (Margaret Mead)

Students around the world are rebelling against and protesting the entire political and social order. This has been a phenomenon of the Sixties, and to our educational institutions will be a continuing characteristic of the Seventies. It has extended downward from universities through the senior and to the junior high schools. It is symptomatic of a deep social movement in our world which some (Mead, 1970) contend is the process of entering a totally new phase of cultural evolution. And the youth remind us they are a totally new generation, for they are the first human beings to have been educated by TV, to be living under the shadow of a mushroom cloud, and to be carrying Strontium 90 in their bones.

The schools will bear the brunt of the protests for they are the immediate environment of the students and represent to them the Establishment. (Reid and Reid, 1969: 175-226; Taylor, 1969: 62-7) Nor is it difficult to focus upon some weaknesses in the school system such as an increasingly bureaucratized structure, authoritarian systems of rules and regulations, alienation in larger impersonal schools, ineffective and indifferent teaching and irrelevant curriculum. The pressures exerted by the schools to prepare students for a competitive industrialized mass society, the system of testing, grading, evaluation, rewarding and punishing may also account for much of this protest by frustrating the students to the point of overt aggression.

School administrators, who are going to be increasingly involved with student protest, should become aware of the politics of confrontation and be aware of their own use of authority and control. The principal, as the authority figure, is becoming obsolete, and "old guard" principals had better be prepared to die or fade away—for they are going to be faced with sit-ins, demonstrations, underground newspapers, violence, demands, confrontations and crucial publicity.

The increasing militancy of teachers through this province and the rest of North America will produce some significant differences in the schools of the next decade. (Keeler, 1969: 4-9) Young teachers, who were the first of the protesting students three or four years ago, have now become the militant teachers of today. The frustration-aggression hypothesis is also valid in this instance, and when young teachers come to schools and find their demands for change thwarted, they react aggressively.

School boards have long been the focal point for teacher hostility and, in many instances, justifiably so. In fact, one primary function of a school board in our educational system is to serve as a lightning rod to attract and harmlessly disperse the electric shock of teachers' wrath as rolls of thunder pass. However, the militant teachers are also looking elsewhere for scapegoats. Somewhat like Pogo they have gone looking for the enemy and now report, "We have met the enemy and he is us,"—the teachers' own professional organization. In the immediate future, the teachers' associations in several provinces will be faced with strong demands for re-organization, quicker response to members' demands and decentralization of services.

Teacher unrest is being increasingly generated by the conflicting position they find themselves in between professionalism and the growing bureaucratic structure of school systems. Urbanization in this province is making the educational systems of Edmonton and Calgary larger than that of the whole province just a few decades ago. The rapid growth of these systems has resulted in the bureaucratization of the central offices, the proliferation of rules and regulations and many dysfunctional aspects of large systems. Here again the militant group of teachers focus upon the central office as the roadblock to effective change and improved education.

Teachers are demanding the right to make professional decisions, and they are demanding the right to make decisions which affect the school system. They see the present hierarchical structure of the school as obsolete, and demand a collegial style of organization with shared decision-making among professional peers. Once again, the principal is right in the middle of the conflict, and he may be the expendable pawn in the play for power.

If this were not enough to place the role of principal in jeopardy, there has been one more significant change here in Alberta which will have long lasting effects on the whole future of education. The Alberta principal has known that he has had a legal status which permitted him, with school board approval and in consultation with the superintendent, to *"allocate the duties of the teachers in his school,"* and made him *"responsible for the organization and general discipline of his school."* (School Act, 1955) Upon this legal basis the principal has taken proprietary interest in "his" school, and has felt secure in the knowledge that he was at the top of the school hierarchy. This has all been removed and the new legal basis for the principal under the new School Act is: *"A board shall designate one teacher to be the principal of each school."* Everything else pertaining to the role of the principal is open to negotiation or left presumably to him to establish his own role. The Act gives more freedom to the local boards. More voice is given to the teachers as well, who are now in a position to negotiate their own duties and working conditions with the principal. Possibly in the next few years principals are going to undergo an identity crisis. They may no longer be appointed leaders of their school staff, but maintain their leadership roles through negotiation, charisma, expertise or innate leadership ability. Alternatively they may identify more closely with the administrative hierarchy and opt out of collective negotiations with the teachers. This is permissible under the new Act and will put principals to the test to see if they see themselves as the leaders of the teachers—or part of the central office hierarchy with all its privileges and status.

## V. THE PRINCIPAL: 1980

The sub-title for this paper, "A Matter of Survival", should now be apparent. Just as in industry, where middle management is being replaced by computers, the principal, as we know him, may be replaced with something else. I have not touched on technology in education, for I think significant developments may not come for two or three decades, and by then the principal may very well be replaced by electronic devices.

In the near future the principal will be faced with school situations that generate more turmoil than ever before, and have far greater complexity. There will be increasing scarcity of necessary resources such as finance, time and skills. His role may be extensively modified, if not lost altogether in the development of new positions and new roles in the future schools, which in turn may be new institutions such as "middle schools" or "free schools" or multi-campus schools, or community schools. These schools are bound to emerge as society demands new approaches and new institutions to cope with the increasing social problems of the future. Qualifications for principals may depend on attendance at encounter groups, human relations training laboratories and even a credential from Esalen or the Cold Mountain Institute. The principal will be at the centre of student protest and teacher militancy, he will be familiar with confrontation and negotiations. He will have to know how to make participatory democracy work and be receptive to shared decision-making at all levels of school organization among teachers, students, board, and the public.

Throughout this paper I have attempted to discuss some of the probable characteristics of the schools of the immediate future, and the function and role of the principal. In each instance there is a political overtone to what the principal will be doing. Jesse Burkhead, an educational philosopher, has said that education is one of the most thoroughly political enterprises in the life of any society. If the principal is negotiating for scarce resources, if he is allocating scarce resources, if he is negotiating, confronting, or gaining consensus in decision-making, he is acting politically. If he is dealing with power and authority, participatory democracy, priorities in education, or his legal role of principal, he is involved with politics. I see the new principal as a *Political Educator* and it will be his political awareness, and political know-how, which will permit him not only to survive but to attain his educational objectives.

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# ELEMENTARY EDUCATION IN THE 1970's

*(Implications for the School Principal)*

**MYER HOROWITZ**

## INTRODUCTION

In June, 1970, I addressed the Alberta School Trustees Association at their annual workshop in Banff on the topic "School Entrant—1970 Model." Many of the issues which were of concern to me then are those that I still consider to be important, and so there is certainly some similarity between my contribution then and my remarks now. I suspect, further, that future discussions will continue to be a variation of this theme that I have been developing and describing for the last few years.

During this year, more than 200 briefs have been presented to the Commission on Educational Planning by agencies of all kinds, including teachers associations and school boards. In my role as a member of one of the task forces of the Commission on Educational Planning — the task force responsible for education from birth to grade 12—I have access to copies of the briefs which have been presented. And in preparation for this and previous assignments, I have read very carefully those prepared by school boards and teachers associations. While some important differences become evident when a comparison is made of the various briefs, I am intrigued by the high degree of agreement regarding the essential goals of education, the importance of early childhood education, the need for learners to search and to discover, the particular needs of social and cultural subgroups in our society, and the changing role of the teacher.

It will be many months before the task force completes its task and about two years before the Commission reports to the government, and so any conclusions at this time on the part of anyone connected with the Commission Board or its task forces would be premature as well as inappropriate. Let me emphasize, therefore, that the views I express are my own.

The concern for education which we are observing in Alberta is not limited to the borders of the Province. Since the Cameron Report was tabled more than ten years ago, most provinces have had their commissions on education. With regard to the educational needs of children, there seems to be a real consensus across the country: the Commission of the British Columbia Teachers Federation emphasizes "involvement" in learning; the Parent Commission in Quebec focuses on "activism"—not only physical, but also emotional and intellectual activism; and the Ontario Hall-Dennis Commissioners, in their attractive and readable report entitled *Living and Learning,* remind us of the importance of the individual in education. Similar concepts are identified in many of the briefs that have been presented this winter and spring to our own Commission.

### Developments in the Education of Children

What kinds of developments in the Education of young children do we observe as we move into the 1970's? Two major aspects of change are evident: *substantive* change and *organizational* change. The substantive refers to that which happens within the classroom—learning, teaching, and the development of the school program. The organizational refers to the scheme or model for implementing substantive changes. When I assess what has occurred during the last few years, I conclude that most of the proposals for change are of the organizational variety. It is obvious that both the organizational and the substantive in education are important, but I am afraid that too often we have concentrated on the organizational and we have neglected the substantive. It is for this reason that I shall deal mainly with the substantive in my comments.

Whether teachers work mainly in isolation one from another or interact as members of a group that accepts joint responsibility for teaching is an important issue. Whether learners move through a series of rigid grades or progress in a more continuous pattern is a key concern. But far more important are the fundamental questions relating to what we consider relevant learning for children and the particular environment which must be created so that learning can occur. How does the learner learn? What should he learn? How do we get learners to explore, to probe, to search? What should teachers do so that learners learn? To what extent is the learner ready to learn a specific skill, to arrive at a particular understanding, and to develop an appropriate set of attitudes which are conducive to learning and living? What kind of environment do we as administrators create so that teachers are helped to teach?

**The learner.** In the 1970's we must place more attention on the early education of young children. In many of the briefs to the Commission on Educational Planning, appeals were made for more public commitment to early childhood education. We must be more clear than we have been about the importance of the development of children before the age of six. More than ever before, I feel that if we are to succeed in convincing the government and the public of the need in Alberta for the kind of support for pre-school programs that we find in most other parts of the western world, we shall have to clarify both for ourselves and for others what we consider to be the nature of the child and appropriate learning for him.

We shall continue to recognize the desirability of meeting the needs and interests of the different children in our classrooms and schools, but, hopefully, we shall be more successful than we have been in translating theory into practice. You and I have taught in schools of this or other provinces, and so we know that learners not only differ one from another, but that an individual learner may differ in ability in different subjects and in different skills of the same subject. In the 1960's, terms such as *individualization* achieved great popularity in educational circles. What do we mean by individualization? Do we mean completely different programs for each child? Is this possible? Even if it were, is it desirable? Is individualization of instruction the same for the teacher in his first year of teaching as it is for the teacher in his tenth year? Is individualization of learning the same for the learner who has been in a relatively free milieu for, say, five years and for one whose experiences to date have been in rather rigid environments? Have we individualized instruction when we divide the program into 24 levels instead of six grades? For some youngsters, no doubt we have, but for others I suspect that we may have substituted one kind of rigidity with another.

**The teacher.** What kind of teacher do we need for the elementary schools of the 1970's? The concept of the teacher as the transmitter of knowledge is a very limited one and one that we shall continue to grow away from during the next ten years. The brief of the Calgary Public School Board suggests that the teacher will become a "facilitator of learning"; the Edmonton Public Board's statement to the Commission claims that "the teacher's role should become that of a director and organizer of learning experiences rather than a dispenser of information."

Honest teachers and principals (and university professors) admit that they have had difficulty in developing the activist classroom and school. Why? Why, when we really want to involve the learner in his learning? People change slowly, and we have to feel secure while we are involved in change. In the post-Bruner decade we have wisely placed new emphasis on *readiness*—readiness for learning. Have we forgotten, however, that we, too, are learners? Have we neglected to appreciate that teachers and principals also have to be "ready" if growth is to occur?

Do you have on your staff the teacher who is sceptical of every proposal that is made—the teacher who looks for signs of failure in every new project, finds them, and then becomes more convinced than he previously was that the "old" ways are the only "right" ways? What about his opposite number who, in my judgment, is potentially just as dangerous as the reactionary? I am referring to the zealot in education, the individual who is quick to jump on any bandwagon and to jump off even more quickly.

Most of us have difficulty in changing the point of view that we have nurtured over the years. Teachers have particular problems in this regard because the same society which holds high expectations for teachers does not always provide them with the support that is necessary to satisfy these expectations. I am concerned by the tendency in some districts of this province, and elsewhere, to increase the size of classes and to decrease the ratio of teachers to pupils in elementary schools.

One of the challenges for you is that you must learn to involve teachers in more of the decision making in your schools. A great deal has been written and said about centralization and decentralization, but in this country these concepts are usually employed to describe the relationships between a provincial authority and local school districts. A particular area of decision making may be decentralized not only at the level of the district, but perhaps even at the school level, but in the eyes of the teachers in that school (and pupils) the enterprise is a very centralized one if they perceive that the principal has not involved them in decision making which they consider to be appropriate for them.

If the elementary school is intended to free pupils, then it must also free teachers to be creative in working with learners. Only when teachers become more involved in significant decision making and become responsible for their actions can we expect a similar increase in the sense of responsibility of learners. But planning and thinking and discussing takes time. Ole Sand, in his address to the International Curriculum Conference in Toronto in 1964, said that:

> If teachers are to be effective in planning for teaching, in initiating innovations, and in conducting experimentation, there must be time to do the job. After school faculty meetings, often described as quivering in unison, are not times for creative thinking. I submit that the *teaching* load of elementary and high school teachers should be similar to that of their colleagues in high education—not to exceed 15 hours per week. The research, planning and development load will then be 25 to 30 hours per week.

Far fetched? Maybe. But those of us who lived the life of the elementary school teacher and who have learned to value and to cherish the time that is available to us now to think and to plan and to search should proclaim more loudly than we do that the competent and concerned elementary teacher has as much claim to the time it takes to be a professional as do we.

In part, in the 1970's, we shall come to terms with this problem by involving paraprofessionals, parents, and other volunteers much more than we have to date. After we get over the initial reaction which grows from fear, we shall realize that the inclusion of non-teachers in elementary schools will *enhance* the professional role of the teacher. For while we shall involve to advantage others on specific tasks, only we can give overall direction to the learning activities. The key professional tasks related to diagnosis of learning difficulty, prescription of the appropriate program, and evaluation of students' progress, we shall reserve for ourselves.

**The program.** What is worth learning? Perhaps in the 1970's we shall learn that the *cognitive* and the *affective* are convenient terms to describe two realms that are not in opposition to each other. Of course schools must be concerned with the intellectual growth of pupils, but, hopefully, we shall be more successful than we have been in concentrating on the child as a human being. We shall be reminded once again of the close relationship between cognitive growth and the development of positive attitudes toward learning.

That we must continue to have a strong and a new commitment to the conventional subjects of the curriculum is a point worth making. But if in the future we are not prepared to deal with the social and emotional dimensions of growth, then we shall fail, for our children and youth will be even more alienated than they are now.

Who am I?
What is my purpose in life?
What am I capable of?
What does life hold for me?
Where am I going?

These are the questions that young people are raising? And we must help them find their own answers to these questions.

**The environment.** What kind of environment do we try to develop in our schools? What climate is essential for teaching and for learning? My first four years in the profession were spent in an elementary school in the inner city of a large metropolitan area. That school was built about 70 years ago, and it looks the part. We had little space and no open areas. The peeling paint on the softwood floors was the only covering they had, and the one time the desks were movable was when, while I was trying to teach something esoteric about eclipses or deserts, I forget which, an overly ambitious and somewhat bored pupil playfully removed all the screws from the desks which prior to that had been attached to the floor. I don't romanticize those years. I know that I would have been more successful than I was had we been in a more pleasant physical evironment. The walls, the floors, the corners in the room, the play facilities outdoors—all are extremely important. But more important, I suggest, is the emotional climate in the school.

Do people trust each other in your school? How helpful are you in working with your teachers? All help isn't helpful, you know. Do your teachers want to be helped? Does your help lead to continuous professional growth on the part of the teacher? After he is helped, is the teacher more creative or more dependent? Does he become more willing to risk decisions or does he become less able to initiate his own actions?

We must admit that whether we are teachers or principals or faculty professors, there is much that we must do to change our attitudes and biases and prejudices. Each of us must accept responsibility for what happens in our schools during the next decade. Earlier, when I referred to decentralization of decision making, I tried to develop the notion that from the point of view of some individuals in a system, there could be centralization at any level. There is a complementary notion that has to do with responsibility. I am concerned with the tendency of some learners and teachers to accept little personal responsibility for conditions and to hold others accountable for all of the system's defects. Is it not also the case with some principals who claim that they are anxious to do things differently but are prevented from doing so by the people around them?

Teachers are the key people in helping learners to learn. And we are the key people in helping teachers to teach. It is in this very important "helping" role that we make our unique contribution to change in education. Your influence as principals will increase as you consciously involve others in your schools in some of the important decision making. During the next ten years, just as the teacher will become less of a transmitter of knowledge and more of a facilitator, so the principal will become less of a transmitter of pronouncements and more of a leader of teachers, parents, and children.

**A need for balance.** In our changes I hope we achieve a sense of balance. The greatest challenge may be for us to master the "bandwagon syndrome" in education. The problems are too important for them to receive the kind of superficial solution that is only temporary and that leads us backward rather than forward.

Must we take every good idea and pretend that we have the answer for all teachers and all children in all situations?

There is value for some children and teachers to function in large open areas.

But should we ignore the need for self contained areas for others?

Learners should develop some appreciation for the disciplines of knowledge and for their structures.

But do we have to ignore life's real and revelant problems?

Learners should learn to explore the unknown, where feasible.

Does this mean that we should pretend that each learner is capable of discovering all that is to be learned.

I have suggested that teachers should be involved in important decision making.

But surely you must not interpret this to mean that teachers should be involved in all the decisions that must be made.

## A CONCLUDING STATEMENT

What about elementary education in the 1970's? If we are really serious about involving teachers in decision making, about satisfying the needs of individual teachers and learners, and about encouraging inquiry and exploration, then it seems to me that we have to achieve consensus with regard to the philosophy for growth and development. Each school, however, has unique characteristics, possibilities, and limitations and must develop, therefore, in its own way. I suggest that there is no one method that will be appropriate for all learners or for all teachers or for all principals.

One aim is that you become more effective principals, and thereby become more effective leaders of teachers. Hopefully, your increased effectiveness will enable more teachers to be more effective with more learners. You and I are not the most important people in education. Ours is a supportive role, for our job is to help to create the kind of environment that will enable teachers to help youngsters
to grow
to explore
to discover
to wonder
to enjoy
to communicate
and so to learn
and by learning to become happy and mature individuals, and productive and responsible members of society.

# SECONDARY EDUCATION IN THE 1970's

**E. H. BLISS**

## INTRODUCTION

Let me set the stage for what I am about to say concerning education in the 70's.

When I was teaching in the high school some fifteen to twenty years ago it was customary for the guest speaker at our gaduation exercises and banquets to point out to the graduating class how they were on the threshold of a wonderful era in the story of mankind. They stressed how wonderful it was to be young in a time when man was about to embark on a technological age in which disease and pestilence would be controlled; man would harness the atom and its power to peaceful uses, conquer space, and create the machines which would enable him to live in plenty and luxury and leisure. Today, in 1970, many of those dreams have been realized, yet most of them are like ashes in our mouths because our attention has been focused on the development of the technological and the material side of life, and we have neglected the human relations. And suddenly we find that as a society we are selfish, unconcerned, and uncommitted. We find student disillusion and unrest; we find family breakdown, separation and divorce increasing alarmingly; we find the statistics regarding illegitimacy absolutely frightening; we find the misuse of alcohol and drugs epidemic among our young people. The question is, "Why?"

I think part of the answer lies in the statement of the theme for this leadership course, "The Principal's Role in the 70's." That statement of theme intrigues and angers me. It angers me because the word "role" carries for me an implication that the principal is some kind of an actor who assumes a part in a drama called "education" in which countless players take part for a little while. And then, when the play is over, all involved return to the realities of living. The theme angers me because it implies that we are going to continue with the histrionics with the same actors cast in somewhat different parts and perhaps giving a different interpretation to those parts. But casting the word "role" aside, the theme intrigues me because it implies a recognition that we must provide a different kind of leadership in education in the present decade from what we have given in the past. It is my conviction that leadership must be radically different, not just a change in "role." Let's stop talking about "roles" in education and start dealing with education as it should be dealt with, as a real and integral part of life in a democracy. Unless we do so in this decade, I am convinced that the school as an institution for the education of young people in our society, particularly at what is now the secondary level, could well disappear. If we can't make schooling more pertinent, more relevant, more meaningful to the conditions of present day living, and more capable of improving the conditions of a democratic society, then society will find more effective, more efficient, and less expensive ways of preparing youngsters for life.

The school system has for a century been the hope of each generation for the development and progress of a democratic society. It has changed only superficially in that time—through the addition of vocational education and more expensive buildings and more sophisticated equipment — while the entire fabric of our society has undergone the most intensive revolution in the history of the human race. But, basically, we still have a teacher in front of 30 to 50 youngsters, telling them, or lecturing them, or preaching to them, or showing them how to read and write and do arithmetic or science experiments. This was the kind of education you and I received as youngsters. Whether you are prepared to do so or not, I am prepared to admit that it has not worked, that it has been a dismal failure. It has been a failure because we have been playing games with, not practicing, democracy in education.

The basic democratic principle, that people learn only by making decisions, including making mistakes, has not been permitted to operate in our school systems on this continent for either the teacher or the pupil. Neither youngsters nor teachers nor principals nor school districts are trusted to make decisions regarding curriculum in this province. The result has been that very few youngsters or adults, teachers or learners in our society have become really involved in education. We all play "roles." And we create therefore a citizenry which is similarly uncommitted to and uninvolved in anything much more than the consumption of the products of technology and the destruction of the environment, each other, and ourselves as human beings. If you should doubt that this is so, I relate to you the interesting statistics compiled by Kimbal Wiles in 1963 in the statement called "The Strange Town."

> If in our imagination we might compress the total population of the world, now more than 3.5 billion persons, into a community of 1,000 persons living in a single town, we would vividly see the following picture of the contrast.
>
> Sixty persons would represent the United States population; the rest of the world would be represented by 940 persons. The 60 Americans would be receiving half of the total income of the entire community; the 940 other persons would share the remaining half.
>
> Of the Americans in the town, 36 would be members of the Christian churches; and 24 would not. In the town as a whole, about 330 people would be classified as Christians and 670 would not be so classified. At least 80 people in the town would be believing Communists and 379 others would be under communist domination.
>
> Classified as to skin color, 303 people would be white and 697 would be classified as colored. The 60 Americans would have an average life expectancy of 70 years; all other 940 would average under 40 years.
>
> The 60 Americans would possess 15.5 times as much goods per person as all the rest of the people. On the average they would produce 16 percent of the town's total food supply, but would consume all but 1.5 percent of that and keep most of it for their own use in expensive storage equipment. Since most of the 940 non-Americans in the community would always be hungry and never quite know when they would get enough to eat, the situation created by this disparity in food supply and in the existence of vast food reserves becomes readily apparent, particularly in view of the fact that Americans already eat 72 percent above maximum requirements.
>
> Of the community's total supply of electric power, the 60 Americans would have 12 times as much as all the rest; 22 times as much coal; 21 times as much oil and gasoline; 50 times as much steel, and 50 times as much in general equipment of all kinds. Of the 60 Americans, the lowest income groups would be better off than the average in much of the rest of the town.
>
> With the exception of perhaps 200 persons representing Europe and a few favored classes in other areas, like South America, South Africa and Australia, and a few wealthy Japanese, literally most of the non-American people in this imaginary compressed community would be ignorant, poor, hungry and sick. Half of them would be unable to read or write.
>
> Half the people of this community would never have heard of Jesus Christ, or what he taught. On the other hand, more than half would be hearing about Karl Marx, Nicolai Lenin, Joseph Stalin, Nikita Khruschev and other Communist leaders.

In June, 1970, I was in England observing the British system of elementary education. In the course of comparing our system to theirs, one of their curriculum advisors suddenly remarked, "Then you really do not believe in democracy in education, do you? We do. What we have been evolving here in our elementary schools is a result of practicing, not talking about, democracy. The government sets out very broad guidelines for education, investing the various educational authorities throughout the country with making the educational decisions regarding the curriculum and school programs. This is passed on to the head of each school. As curriculum directors for the school authority, we operate strictly in an advisory capacity, not a directive one, to the head and his or her staff. In turn, the head assumes full responsibility for the curriculum decisions and the educational program in his school. The overall school program is arrived at by the head and his staff, but each individual teacher makes the educational decisions as to materials and procedures to be used with his or her pupils within the general framework arrived at for the school. And in the classroom each youngster is free to choose the activity and project he wishes to investigate."

I visited a number of schools in which this approach by school authorities, heads, teachers, and youngsters was being used. I was impressed by the approach to understanding and learning which the head and teachers and children had developed by this kind of total involvement in the learning process. I was impressed by the fact that in these schools learning has been completely individualized. I was impressed by the consummate skill of the teachers, by the self-direction of the youngsters, by the purposefulness of their activities, and by the fact that I did not see an unhappy child nor one who would not sooner be in school than at home or elsewhere. I returned convinced that our rigid, centralized approach to curriculum development must be replaced by one which emphasizes flexibility and decision making at the school and classroom level.

## SECONDARY EDUCATION IN THE 1970'S

Now let me turn to the question of secondary education in the 70's. It has been the fashion to predict what will take place in education in the next 10, 20, or 30 years—another example of how many of us in education joust at windmills and engage in every kind of activity except that of coming to grips with the realities of education today. These predictions have more often than not outlined how the glories of technology would create an administrator's heaven through the use of computers, which would solve the more complicated timetabling problems, which would be tied into a world-wide information retrieval system, and which would have countless terminals through which pupils would hold the most amazing dialogues and learning sessions. There would be programmed instruction and teaching machines of all kinds, large libraries of audio tapes of every conceivable kind of lecture, speech, debate, commentary and dialogue that one could wish; similar libraries of films, and video tapes; and, of course, banks of individual electronic carrels where all this wonderful material could be played and replayed, viewed and reviewed, ingested and digested. And behold, we would have reached the millennium. No fallible human teachers would be needed, only technicians.

So far removed have we become from real education—so little *real* involvement has there been in education on the part of the general public, the legislators, and the educators, that the automated educational plant providing information for the mastery of students is, in the minds of many, the ideal. Most laymen and many educators still believe that the content of education is more important than the process. The most urgent task facing us in the 70's is to dispel that belief through involvement of the total community in education.

Changes in secondary education in the 70's will not be spectacular. The number of imaginative designs, such as John Bremer's Philadelphia Parkway Project, will increase as more people seek ways of breaking out of the sterile straightjacket in which we have encased ourselves. The greatest danger of spectacular change is from students and public, in frustration and disgust, declaring the system of secondary education obsolete and finding new ways of doing the job. I consider this kind of action to be entirely possible within the next ten years unless action such as I outline here is taken.

### I. A Pattern of Curriculum Development must be Established.

1. Curriculum must be understood by all as the total experience received by the student under the auspices of the school, its value depending more upon the nature and quality of the activities engaged in than upon the content or the material studied or used.
2. It must be understood that the closer to the source of action curricular decisions are made, the more meaningful and effective will be the curriculum. Furthermore, it must be realized that the farther curriculum is developed from the source of need, the more difficult it is to make changes when the need arises.
3. The individual school must become the basic planning unit and the source for initiating improvement in curriculum in keeping with the perceived needs of its particular students and community.
4. The function of the school district in curriculum development must be perceived to be that of advice and support to the individual teacher and school, and of co-ordination of those studies and activities which deal with problems common to several schools.

### II. Curricular Decisions must be made at the School Level.

It must be clearly established that the principal is head of his school. As such he will determine, with his staff, and within the broad guidelines laid down by the Department of Education, the nature of the educational program for his school. He must accept both the responsibility and the accountability for that program. He should be accountable to his pupils, his community, and his conscience for the relevance and quality of the program he provides for each student, not to the Department of Education. It cannot be otherwise. Of all the authorities

—Department of Education, Local Board of Education, individual school administration —only the latter (the principal and his staff) is in a position to determine the interests, needs and abilities of the community, his student body, and of the particular needs of individual students within that student body. Therefore, only the principal (with his staff) is in a position to make the following kinds of decisions:

1. The emphasis to be placed upon intellectual development and upon social adjustment.
2. The emphasis to be placed upon the integration of knowledge (through individual or group work on projects or problems which cross subject lines) and that to be placed upon the study of disciplines separately.
3. The degree to which the school should concentrate on a basic, relatively unchanging curriculum, as opposed to a flexible program which can be changed according to the needs of pupils and community and the talents and skill of the staff.

### III. The School must seek the Active Support of the Community in What it is Attempting.

There can be no question but that, in a rapidly changing world, the battle in education today is between old concepts of what the curriculum should be, and the demands of a generation which requires that learning be meaningful, relevant, and have practical value in terms of individual and collective human development. But, on the one hand, our society is accustomed to a traditional, rigid curricular system and will denounce, as frills, progressive, and lacking in substance, any program changes that break the mold of preconceptions of education; on the other hand, there is mounting evidence that students and the community in general are disenchanted with present secondary education. They tolerate it as an irrelevant, outmoded bureaucratically dictated necessity rather than perceiving it to be a vital and meaningful force for human growth.

We desperately need a relevant curriculum which is responsive to the needs of the student and designed to meet those needs as he perceives them. We can only develop it if the school maintains close ties with its community, enlisting the aid and advice of parents, involving community groups and parents in a consideration of curricular needs, and keeping the community fully informed of changes and their results. During the 70's the principal and his staff must end the isolationist policy which has prevailed since World War II and take positive action to ensure that their community is a full partner in the move to improve the curriculum and give the school meaning in the community.

### IV. The Principal, his staff, and the community must come to regard the classroom as merely the base for the development of meaningful learning experiences, not necessarily the place for them.

The segregation of the pupil and his learning experiences from the total environment surrounding his life must end. The first small steps have been taken in this direction in the increasing use of field trips. Such activities will become an important part of the educative process as teachers, through experience, discover how to take full advantage of the learning situations encountered to stimulate inquiry. They will play an important part in teaching us how to integrate knowledge and break down our rigid adherence to subject or discipline divisions, and carefully structured and classified timetables. They will play a major part in stimulating responsibility and a love of learning in our students.

### V. Curricula must be open-minded.

Programs, projects, problems and courses provided in the school must be stated in terms of goals to be achieved and of behavioral objectives rather than in terms of content. Goals and objectives must be arrived at by a consideration of both community needs and the recognized needs of students as individuals and as groups (i.e., of adolescent boys, of new Canadians, of excellent mathematicians, of students with weak communication skills, etc.).

### VI. Innovation and resourcefulness, not prescription and standardization, must become the chief characteristics of the secondary school.

The loosely structured Group A and Group B elective program of the Alberta Junior High School Handbook is designed to encourage innovation and resourcefulness. There should never be *the* curriculum for a particular student. There are a multitude of ways he can learn. Some are much better than others, for him. The challenge facing every teacher is to find the activities a pupil can choose which will permit him to show and exercise his own initiative.

### VII. A relevant secondary curriculum must deal with values.

The major issues of our day are those requiring value judgments. Whenever students are placed in a position where alternatives must be considered, the existence of personal, community and societal values, some of which are in conflict with one another, is faced. No educator can omit the question of values in the curriculum. To be sure, no educator should ever permit himself to adopt the indefensible position of attempting to teach children the "correct" values; but no educator can exclude their consideration from the classroom because of their controversial nature.

## CONCLUSION

Curriculum is what it is all about! No principal should allow administrative arrangements or lack of community understanding to hamstring curriculum change.

The administrator's task in curriculum development is a fourfold one:

1. To encourage teacher resourcefulness and initiative and to direct innovation.
2. With the help of the community to interpret the needs of the community and its youngsters and provide a curriculum which is meaningful and pertinent to them.
3. To marshall all available resources, including those of the immediate community, which will provide relevant learning experiences for the students in his school.
4. To develop the conditions which will make it possible to give pupils the freedom to select their own activities and engage in an individualized program under the direction of the school.

Unless such steps as these are taken by large numbers of courageous and dedicated principals who can stimulate their staffs to innovate, I predict our schools will be subjected to a tremendous amount of public pressure and abuse. The leadership must be provided at the school level. Changes will be excruciatingly slow, particularly in the secondary school, where we have pupils who have never learned self-direction, and who have become disenchanted with learning; where we have teachers who are not accustomed to making curricular decisions because they have always been subjected to a more or less set curriculum and rigidly classified time tables; and where the measure of pupil progress has been the Departmental examination.

Changes will be slow because the methods of instruction and learning will have to be discovered through experience by the teachers. They will have to carry out imaginative exploration of materials, activities, situtions and problems—be people that stimulate youngsters. They will have to learn how to direct lines of inquiry, and work within a day which is far less rigidly mapped out.

Let me end by saying that the process has already started. There are many principals in our schools who are encouraging the necessary kind of innovation. At one of our high schools, a team of four teachers has worked out a program for integrating the learning experiences for a group of 100 or more Grade 10 students for 1970-71. They have ensured that the problems and projects selected involve the learning of English, social studies, chemistry and biology. The principal has scheduled the students into the four classrooms involved every morning all morning for the year. The teachers are excited and enthusiastic. Their task is to ensure that the pupils become excited and enthusiastic about learning. The content of the program can be as varied as the teachers and pupils wish to make it, but the teachers guide the pupils' activities to ensure that they develop skills and concepts set out as related to each of the four areas of Biology, Science, English and Social Studies 10. A new high school, opened in the fall of 1970, has been organized to integrate the learning experiences of pupils and to individualize instruction. It incorporates the Unipac approach developed in another of our high schools—an approach which enables a student to choose from a number of units and move through the program at his own rate. It incorporates an Apex approach to English worked out by another of our high schools, where the student selects his English program from a wide variety of units being offered. From beginnings such as these we hope we can revitalize the secondary school program during the 70's.

## ADDENDUM

## PROPOSED: AN INTEGRATED PROGRAM OF STUDIES AT EASTGLEN COMPOSITE HIGH SCHOOL

The process of education aims at relating the whole person to the totality of his world. It is an inclusive process, which enables the individual to "make sense" of new experience by comprehending and incorporating it into an expanding but integrated view of reality. It is surprising, therefore, that the institution entrusted with the educative task should be characterized by what Edgar Friedenberg calls the "fragmentation of experience."

Compartmentalization pervades much of the school experience. On one hand, the student is engaged primarily at the cognitive level of his person. He is considered a thinker and a worker, but rarely, for example, a celebrant or a visionary. On the other hand, his school-world is also fragmented. The day is divided into "blocks" or "periods" which only coincidentally correspond with the times actually needed for specific tasks. The curriculum is compartmentalized into separate subject areas or disciplines. Tom Wolfe, in an essay on Marshall McLuhan, describes it this way:

> The thing is, all these TV-tribal children are aural people, tactile people, used to learning by pattern recognition. They go into classrooms, and there up in front of them are visual, literate, print-minded teachers. They are up there teaching by subjects, that is, categories; they've broken learning down into compartments—mathematics, history, Geography, Latin, biology — it doesn't make sense to the tribal kids. It's like trying to study a flood by counting the trees going by. It's unnatural.

The educative community is also fragmented. Group continuity is broken from one class to the next. The constant shuffling of classmates and teachers makes it difficult for a student to develop allegiances to any but a small group of personal friends. As a result, he feels little sense of belonging or responsibility to the wider school-community. Finally, the school itself is often severed from the larger society-community. Restricted interaction between school and society leads to the former becoming a kind of "adolescent ghetto."

Such fragmentation predictably has a deteriorating effect on the student's attitude towards the whole school experience. What happens there comes to be seen as unrelated to the world he experiences when not in school. For many students, the only real connection between the school and the society is the school's authority to confer credentials for entry to jobs, technical schools, or universities. This unrelatedness is also a source of the double standard of appropriate behavior that often exists in and outside the classroom. The "ghettoized" schools, like most ghettos, tends to operate according to rules and expectations of its own.

If the fragmentation described here is, in fact, part of the predicament of secondary education today, the question then arises as to the task of reintegration. One thing seems clear: limited or piecemeal attempts will simply not do. Compartmentalization so pervades existing high school structures that isolated attempts at reintegration are compromised from the outset.

As an illustration, consider the use of field trips in the attempt to relate school experience to happenings in the world. Structural deterrents to frequent trips are really ingenious. In the first place, a single field trip, due to the complexity of student programming, can interrupt the flow of numerous other courses scheduled for the same day. Dispersive programming means that the students taking the trip will derive from a score of different classes scheduled for the same morning or afternoon. The trip is likely unrelated to the concerns of these many interrupted classes because of the nature of subject specialization. As a result, other teachers are likely to view the trip mainly as an inconvenience. Faced with such attitudes and the question of what to do with his own classes that are not along on the trip, the field-tripping teacher soon becomes discouraged with the whole idea. He learns that one or two trips per class are all that can normally be tolerated during a single term. When this is the case, it is inevitable that students should view the trips that do take place as "holidays" or "days off." Field trips thus become educationally subverted; "bad trips" reinforce the conviction that students and teachers belong in the school building and not in the community.

Or again, consider innovation in the area of curriculum. The proposed Social Studies 10 curriculum now being piloted across the province is a case in point. It is basically a good curriculum. It attempts to deal with significant topics in terms of the contemporary Canadian situation. In spite of this, however, the piloting teachers are often frustrated by the fact that their own enthusiasm for the course is rarely matched by that of their students. Now, it is pointless to argue that the curriculum is irrelevant "to the students' concerns"; a curriculum dealing with the major determinants of life in 1970 Canada is relevant to Canadians by definition. Then, why the apparent lack of interest? The teacher's first response will likely take on a confessional tone: "I was not able to present the curriculum in an interesting way." Of course, this may be true. On the other hand, such a personalistic analysis too often stunts continued reflection on the problem. For it may be that the roots of the problem have as much to do with the structure as with personnel. It may be, for example, that within the context of a ghettoized school, little if anything of significance to the adult world will be perceived as relevant. Issues facing men and women in society perhaps cannot be seen as real issues from a place where washroom doors continue to label sixteen to eighteen year olds as "boys" and "girls".

Examples such as these illustrate the point that the problem of fragmentation is too complex to be solved by isolated innovations or adjustments. Rather, a program of reintegration must be broadly based and thoroughgoing.

Here are some possible objectives for such a program:

1. Maximizing interaction between the school and the community. This involves the "deghettoization" of the school. On one hand, the high school should be seen as a resource for learning which is available to everyone in the community. On the other hand, it should be "turned inside out" so as to make utmost use of specialized facilities and personnel within the community.

2. Nurturing what Herbert Thelen calls a "community of concern" among students and teachers. Reintegration involves the humanizing of the school-community. It is only in such a climate that the risky business of examining one's own values and questioning one's own attitudes—the "meat" of the educative process—can freely proceed.

3. Developing more eclectic approaches to the curriculum. The occasion for the educative process is not the theoretical existence of separate disciplines or subject areas but rather the prior existence of a body of problems confronting man. The integrated curriculum begins with a human problem and then petitions the diverse subjects for relevant insights.

The point of departure for attaining these objectives would be the programming of a group of students and teachers into a consolidated class through the period of a morning or afternoon. In terms of present programming practices, such a half-day consolidation could be achieved by scheduling three classes of mixed membership to say, a study period, English 10, Social Studies 10, and Biology/Chemistry 10, where they would be taught by a common group of three instructors. Offically, then, the English teacher would be scheduled for a preparation period, followed by three classes of English 10, as would the other two teachers in their own subject areas. However, over the space of a half-day, such programming permits the emergence of a consolidated group of 90 to 100 students together with a team of three teachers.

The consolidated class would be the key to attaining the objectives listed above. Since it functions over a half-day period, it allows for the time needed to get students into the community. Moreover, it permits a more informal timetable to emerge, one based on the time needed to complete specific tasks. The consolidated class would provide a degree of group continuity that would be the basis for a developing sense of community among teachers and students. It would also facilitate more varied and flexible forms of instruction. Since the teaching team would derive from diverse subject backgrounds, an eclectic approach to the curriculum would become a lively option.

As well as programming a consolidated class, several other steps would be taken:

1. The existing curricula of the subjects involved would be correlated so as to facilitate eclectic or cross-disciplinary study wherever possible.

2. An inventory would be made of available community resources. These would include libraries, museums, industries, university facilities and personnel, social agencies, and so on.

3. The participation of responsible older students would be encouraged in various phases of the program. Such students would further integrate the community by cutting across grade lines and reducing authority barriers to teacher-student communication. They would also provide positive models for younger students.

This proposal has dealt with general aims and procedures for a program of reintegration of the high school experience. There are, of course, other issues and numerous details that would have to be raised and worked out before such a program were actually put into operation. Transportation and evaluation are just two of the issues that would have to be dealt with. And there are many more. Yet, the teachers who have been involved in the discussions from which this proposal arises are confident that the plan is workable and are eager to put it into operation among three classes of grade X students at Eastglen Composite High School during the 1970-71 term. We cannot know what we have not done.

The Eastglen project has been programmed for *four* teachers (English, Social Studies, Biology, Chemistry).

# RESOURCE ACQUISITION: A BASIC ADMINISTRATIVE TASK

C. S. BUMBARGER and F. C. THIEMANN

## INTRODUCTION

One of the major tasks of the administrator is acquiring resources for his unit or sphere of operations. This is a task applying to all levels and all types of administrative positions. The methods the administrator chooses to utilize and the administrative style he is inclined to adopt have serious implications, particularly for the sector of the organization in which he holds primary responsibility. Every organization, or any sub-unit thereof, exists to work toward certain ends. Resources are the means which enable an organization to progress toward goal achievement. These resources and their characteristics are the focal points of this paper.

## RESOURCES DEFINED

To further delineate the area of concern and to more clearly focus upon it, a specific definition of resources will be utilized in this paper. For our purposes, *resources are defined as anything which can be used to help achieve organizational ends.* This definition is offered as a device to help sort out a number of factors that might be overlooked—or that might not otherwise be recognized—as resources by administrators in the field.

It should be noted that the administrator is not required to utilize all of the resources detailed herein; in fact, his particular value system may cause him to view some means as indefensible. This alone does not, however, eliminate them as available resources. Neither does it guarantee that fellow administrators—perhaps his competitors for scarce resources—will also avoid their usage in order to reach organizational objectives. As always, a degree of individual choice is available.

In this paper, the argument for presenting a reasonably comprehensive list of resources is that it provides sufficient information to demonstrate that choices exist. Furthermore, absence of information actually reduces rationality of decision-making; the administrator without information is in a difficult, perhaps untenable, position.

## TYPES OF RESOURCES

It is possible to differentiate among resources on the basis of type, i.e., categories can be developed which are fairly descriptive of the resources and which also can separate them into groups with somewhat similar features. For our purposes, two broad categories are presented to afford a basis for viewing resources in differing ways.

### Obvious Resources

Resources commonly identified in the literature and also commonly accepted in the prevailing folk-wisdom are people, materials and space. People, of course, are the basic components of organizations. Manpower is the force which gets the job done. Time is commonly used as a measuring unit for quantifying people, e.g., so many hours, days, weeks or other periods of human effort. For convenience this measure is often simply collapsed into the number of people involved, e.g., so many elementary teachers, as a method of describing the amount of human effort available.

Materials are of many kinds; in fact, a whole typology could be developed for this resource. Common examples are capital goods and expendable or consumable items. Differentiation can also be based upon the functional dimension, e.g., instructional materials, office supplies, etc. The essential point, however, is that materials are resources used by people while working at organizational tasks.

Space is a somewhat different kind of resource. This is the arena within which organizational tasks are performed. Usually this requires some kind of physical structure. Spaces, too, can be classified along a number of dimensions. Functional classifications, for example, are such labels as classroom, storage, office, etc.

People, materials and space constitute the obvious or visible resources available to the administrator in the organization. Clearly, one of his resource acquisition problems is reaching some minimal *quantity* level in each of these resource areas. Another acquisition problem relates to the *quality* level of the resources acquired.

### Money Not an Obvious Resource

It should be noted that money—that is, financial resources—has not been mentioned as an obvious resource. This is because money is viewed in this paper as a *medium of exchange* and as such of no worth except in terms of the resources it will enable the administrator to acquire.

> Without it (money) all trade would be barter; all payment would be in kind. With it, money is traded for goods and goods for money. Money, then, is the common denominator, or the medium, of all exchange. (Haveman and Knopf, 1966: 32)
>
> . . . Money, as money rather than a commodity, is wanted not for its own sake but for the things it will buy! We do not wish to use up money directly, but rather to use it by getting rid of it; even when we choose to use it by holding it, its value comes from the fact that we can spend it later on.
>
> Money is an artificial, social convention. (Samuelson and Scott, 1968: 60)

The administrator with ample money may, in times of teacher shortage, still be unable to acquire enough teachers of the quality required in his situation. In other words, if the resources are not available, money is of little consequence. Of course, given an ample available pool of the three obvious resources, the administrator who has a plentiful supply of funds is in a stronger position, since he can compete more effectively for them. Therefore, while money may be necessary as a medium of exchange to acquire the other resources, it cannot be viewed as sufficient in its own right.

### Subtle Resources

Another group of factors exist that are best categorized as subtle resources. As the title implies, these are less obvious — and certainly much less visible—than are those factors designated as obvious. This group of resources is somewhat akin to finances in that they are means *toward the acquisition* of the obvious resources—people, materials, and space. While many such factors exist, only a few representative examples are considered.

*The Social Network.* Often only indirectly noted, the social network is rarely overtly identified as a resource. Yet the bold fact is that the nature of the social network within which the administrator moves is an extremely important factor as it relates to his success in acquiring resources for his operation. (Greer, 1967: 4-5)

The administrator's contacts with people might be visualized as occurring upon a continuum ranging from purely business to purely social. The type of relationship he has formed with any specific individual is located at some point between these two extremes. The social network is made up of all contacts, not only the purely social. Exceptions are those exclusively job-related. While his purpose in developing a wide-ranging network of social contacts may not stem from a conscious desire to gain resources, nonetheless such a network produces precisely this effect. The network acts as a communication system, touching many parts of the community outside the system of school employees only. This communication system diffuses information about the organization, its performance, new developments and future plans. Its potential for effective transmittal of this information is much greater than is that of formal communications channels. (Shaw, 1954: 547-53)

A communication system should be a two-way operation. Not only does the administrator transmit information, he also receives it. (Kelley, 1951) On the one hand, he modifies the environment in which his organization exists through the information he sends, while on the other, he is able to modify the organization further by the information he receives. Stated another way, the social network becomes a series of contact points with other subsystems of the larger supporting system. (Greer, 1967: 21-26)

The hierarchical nature of the formal organization usually restricts the administrator to his information exchange so long as he depends exclusively upon the formal channels. The social network allows him an auxiliary communication system with an expanded opportunity to present his case or to have his case heard. The literature abounds with references to informal communication systems within organizations. (Rollins and Charters, 1965, 65:167-178; Charters, 1969, 5: 15-38; Barnlund and Harland, 1963, 26: 467-479; Zipf, 1946; 59-401-421) The social network extends this informal system to persons outside the immediate organization.

The social network is a series of personal relationships, formed by choice rather than by chance circumstances as might be the case with on-the-job associations. The fact that they are personal in nature should be carefully noted, for individuals relate one to another as persons, without consideration for the particular work position held. This means that the administrator cannot successfully plan to consciously "cultivate" an acquaintance with a selected group of people. Personal ties develop as a result of associations and may not be with such target individuals.

A common mistake made by the administrator is to accumulate a wide range of group memberships. Not only are some groups permanently closed to him, (Grusky, 1960, 39-105-115) but also it may not be necessary that he become an actual member of these groups. Instead, he can form bridges or connections to these groups through social ties with someone who is already a group member. Thus the needed information is transmitted through an intermediary.

*Personal Attributes.* The personal attributes of the administrator are relevant factors in obtaining resources. Certainly personal charm would assist in hurrying the development of the social network as does a genuine interest in people. Perceptual ability is also a factor, i.e., facility in making fine discriminations among the pieces of information received or sent is a valuable attribute. Sensitivity to cues—both verbal and non-verbal—is also an important element in assessing feedback as a prelude to modification of behavior. This does not gainsay the results of early research about administrator traits but rather argues that the effects of these characteristics are mediating in nature, acting indirectly. (Thompson, 1961; Stogdill, 1948; Hemphill, 1950)

*Expertise of the School Unit.* A resource seldom appreciated is the expertise of available personnel in the administrator's area of responsibility. This refers to *all* personnel including caretakers and the like. There is research evidence showing that people representing certain segments in the community communicate with only certain of the school's personnel, not all members. (Gallo, 1968) Thus all personnel may be considered as contacts with some portion of the supporting environment. To the extent that they convey favorable impressions, provide certain kinds of information and knowledge, and have different social and communication networks, their expertise is a resource. Expertise, as a concept, obviously has ramifications beyond communication with the community. Higher levels of expertise ordinarily also mean greater productivity which enhances the results of the school's efforts. As this performance level becomes generally known, the reputation of the school unit is heightened and more trust is placed in the staff. Thus requests for resources are more likely to be viewed with favor.

*Action Demands.* There is a tendency to view demands made upon the school organization as problems or as evidence of an undesirable situation. They, however, can also be resources and turned to advantage. Some demands for action come from the staff and represent attempts to improve or up-grade the situation. A particularly able staff is more likely to be the source of such demands. If the staff has extensive powers, they may enable the principal to acquire more resources through evidence of their support for his action. (Thiemann, 1970) Certainly these demands will push the principal to obtain resources. Some action demands from outside the school unit itself may serve the same function if used as evidence of need. These action demands may stem from pressure areas as narrow as the immediate community or as broad as the nation or world.

*Quality of Materials and Space.* To the extent that quality enhances performance and results, the quality of materials and space constitutes an indirect resource in its own right. Quality may facilitate instructional efforts or may merely provide the illusion of such. In either case, the visibility achieved is a resource which can be instrumental in acquiring more resources.

*Service.* Service is somewhat related to action demands, yet there is a subtle difference. Schools perform certain services for the community beyond those afforded by the results of the educational program itself. Staff members participate in community efforts, and schools "host" certain activities or provide some kinds of entertainment for the community. Two effects can result, either the services provided serve as a door through which more resources may be gained or, along with the acceptance of the service, the community becomes more aware of some of the resource needs of the schools and thus is prompted to make more resources available.

*Ideology.* Ideologies represent views to which people are strongly committed. This commitment causes them to expend energy in support of their views. The energy becomes a resource along two dimensions. First, if ideologies held by individuals and the goals of the organization are reasonably congruent, more human effort can be expected to be expended. The effect is due to increased commitment to the organization. Second, if community ideologies are furthered by the group's efforts, then the reward is greater support. When members of a group become more homogenous they not only will have greater influence on one another but they are more productive in task efforts. This also results in greater satisfaction. (Sapolsky, A., 1960: 241-246; Wiest, W . M., et al., 1961: 435-440) Even in the case of conflicting ideologies there may be resource benefits. (Maier and Hoffman, 1961) In this instance, the competition causes proponents to bend even greater effort to advance their respective causes. This may well mean greater demands for resources (which may be translated as action demands) requiring heavier resource allocation to the activity enhancing the ideological position.

Ideologies — and competition between them—may be on the personal or community level but may also be on the national level. The classic example, often-cited, is the launching of Sputnik I which startled the citizens of the United States and which has been credited with opening the public purse to the provisions of many millions of dollars for public education. To the extent that proponents of particular ideologies see schools as a means to further their views, they may clamor for allocation of resources to the schools.

## CONSTRAINTS UPON THE ADMINISTRATOR

The principal has a wide range of resources from which to choose. He can focus directly upon the obvious resources as targets or he can attempt to acquire and utilize some of the more subtle types as means toward resource acquisition. However, he is not completely free to pick and choose, he cannot simply zero in upon a resource target and go after it. In order to devise an effective resource acquisition strategy he must be aware that he and his school are located in a bounded environment. He must take account of the boundaries—the restrictions in the situation—as he plans his strategy. Some of the limitations are quite obvious, some are subtle. If he hopes to experience substantial success, he should try to discover both types of constraints as they exist in his situation.

### Obvious Limitations

A number of limitations are obvious or at least are quite apparent. It should, of course, be remembered that not all apparent restrictions are real. Furthermore, not all limitations operate all of the time. The principal might do well to engage in thoughtful study of the discernible constraints in an effort to ascertain any special conditions under which they may not operate. In other words, he should learn to know his situation in detail.

*Rules and Regulations.* These constitute apparent limitations and are often cited as reasons for lack of success in acquiring resources. Yet, rules come from many sources, some of which are quite accessible to the principal. If accessible, the sources may be susceptible to requests for waivers — or outright cancellation — of specified rules and regulations. Furthermore, it is quite common for an *interpretation*—as an administrative act—to be the real restricting factor. If this is the case, the interpretation may be subjected to re-examination.

Rules also are often differentially enforced for a variety of reasons. These reasons should be known to the principal; he should try to become aware of them. In summation, knowledge of the rules and their enforcement is a part of the administrator's kit. (Davis, 1968)

*Financial Limits.* Finances—or lack of them—are often cited by administrators as reasons for their ineffective performance. Aside from the fact that this reaction ignores or avoids the possibility that the available finances might be used in different and perhaps more effective ways, simple acceptance of stated limits is poor administrative action. Again the principal should become as knowledgeable as possible not only about all sources of fiscal assistance but also about the basis upon which shares in the finances are determined. While recognizing that there will exist, somewhere, some finite limit, he should still attempt to ascertain for himself whether or not this limit is as stated and further, whether or not it need apply to his unit.

*Accepted Norms.* There exists in every organization a wide range of norms for administrative and staff behavior. These usually constitute a body of unstated rules and regulations. However, any norm also encompasses a wide range of behavior, so wide in fact that it is often difficult to clearly determine the nature of unacceptable behavior. Furthermore, the school operates within a web of societal, community, organizational and professional norms many of which are conflicting. The reality of normative constraints, then, also requires careful examination of the perceived norms and occasional testing of them, if their dimensions are to be delineated with reasonable accuracy.

*Availability of Personnel.* This, too, while also apparently obvious, is in reality not any more sharply defined than are the three limitations noted above. Availability of personnel is determined in large measure by the current definition of acceptable minimum standards. Even here, however, ample evidence can be cited showing that these definitions have often been waived for a variety of reasons. The administrator is facing apparently straight-forward limits, which are in fact anything but such. The principal must delve beneath the surface to establish the true state of affairs.

In summary, while limitations upon the principal's actions in acquiring resources do exist and do seem quite obvious, the exact nature of each of the limitations is not nearly so clear-cut as it may appear. In the interest of establishing the real boundaries of his arena, the principal must exert effort to unearth the exact dimensions of the existing constraints. In one sense, this action is, in itself, an element of resource acquisition.

### Subtle Limitations

As shown above, even the obvious limitations have a degree of subtlety about them that renders their true natures less readily perceptible than the impressions conveyed to a viewer by initial perceptions. Even so, in addition to these constraints there exists another set so nearly invisible that their effects—rather than the limitations themselves—are the factors to be noted. Although less visible, they are nonetheless real and the prudent administrator will attempt to search them out and recognize them as forces which will limit his effectiveness in acquiring resources for his unit.

*Socialization Into the Field.* In every professional field, a portion of the preparation period is devoted to modifying the neophyte into the practitioner. This is actually a process of socialization into his profession. The intention is to achieve a close identification with that field—its goals, beliefs and norms—so that these become reference points, and his colleagues are his reference group. This socialization, if effective, serves as a "built-in" monitoring system affecting his behavior. This is necessary since the true professional is most often working under conditions of little or no supervision.

Socialization into a field helps establish boundaries for behavior, which tend to assure ethical performance. The degree of socialization into the profession of his colleagues also sets boundaries in the same way for the principal's behavior vis-à-vis his colleagues.

Another socialization process occurs as a practitioner joins with colleagues to form a work group. (Berlew and Hall, 1966) The behavioral norms in this situation are more specific and more closely related to the immediate situation than are those developed by socialization into the field. Such norms also function as guides for behavior.

An obvious problem is entailed in those instances of direct conflict between norms of the field and those of the work group which occasionally occur. Such conflict is resolved either through withdrawal of the individual or the suppression of one set of norms. The norm set remaining thus identifies the individual's primary reference group, local or cosmopolitan.

*Role-Sets.* Role should not be confused with a position or organizational office. Role is, instead, the set of expectations others hold for the incumbent of a position. The expectations come from all those with whom the position-holder interacts. It is obvious that there may be conflict among the expectations of relevant others for the principal since a wide variety of people interact with him and see for him narrow channels of appropriate behavior.

A second source of problems is the possibility that the principal misperceives the expectations of others. The cues which he detects may be incomplete or misread thus giving him inaccurate guides for his behavior.

Furthermore, most human beings hold a variety of positions—in many different organizations and groups—each of which has its own set of norms. These can well be in conflict with each other. The wider the range of roles an individual assumes, the greater the amount of conflict among role norms.

Regardless of the accuracy with which expectations are perceived and the extent of his willingness or ability to meet these expectations, the important point is that these role-expectations constitute a real — although subtle — set of constraints upon the principal and his behavior. (Westwood, 1967; Miller and Shull, 1962; Katzell, 1968)

*Aspirations.* Quite often an individual has career ambitions or goals which he hopes to attain. By virtue of these ambitions and goals, limits are inevitably placed upon his behavior thus eliminating a number of alternate choices.

Another aspect of the constraints posed by aspirations is illustrated by those with ambitions for promotion within the system. If in-system advancement is to be facilitated, superiors must be impressed by the aspirant. In this case, some behaviors may be suppressed in order to project an intended image while, conversely, other behaviors may be stimulated for the same reason. In any event, the behaviors elicited are not solely in the interest of the employing unit. To the degree that organizational goals and the individual's interests conflict there is a likelihood of reducing the effectiveness of resource-acquisition behaviors.

The effects of career aspirations are not limited to administrators. Staff members also have ambitions which may result in similar limitations. Staff ambitions may also result in a misinterpretation of institutional needs by the principal, with consequent misdirection of effort upon his part.

*Available Expertise.* This is a corollary to the expertise described earlier as a subtle resource. Expertise in the school unit exists in varying degrees and within definable areas. To the extent that it is unevenly distributed, it may also constitute a constraint due to jealousy among staff or to differing perceptual abilities or levels of understanding of staff members. If variable expertise levels produce a disruptive rather than integrative influence upon the personnel the result is the imposition of more limits upon the principal.

From another perspective, as expertise of the staff increases, the principal's decision autonomy is reduced. This is merely another way of describing a constraint.

*Competition.* The school unit exists in a competitive environment, within which it must work to obtain and retain resources desired by other units. This requires both offensive and defensive activity. To the extent that effort must be expended to prevent inroads into established levels of resources, energy available for attempts to acquire added resources is reduced.

Competitive forces in the environment are not limited to external relationships; some competition for resources exists *within* the unit. An inevitable consequence is a greater fragmentation of the staff — even if only on an intermittent basis—which dilutes the unity required for maximum success.

*Primary Group Relationships.* A limiting effect which primary social group relationships have on resource acquisition is that homogeneity may prove to be a handicap. It has been found that when members of a group reach a similar opinion or judgment before the issue or problem has been openly discussed they are less likely to make a good decision than if there had been disagreement first. A primary social group may close the discussion too soon. This closure will have an effect on the creative solutions that might otherwise have been devised. Homogeneous primary groups do a better job on routine tasks while heterogeneous groups are much better at problem solving. (Ziller, Behringer and Goodchilds, 1962)

These factors are examples of constraints upon the principal's activities as he attempts to gain additional resources for his school unit. His basic problem then becomes the development of strategies for obtaining more resources given the restrictions and limitations within which he must work. It is obvious that in order to deal with this problem the administrator must *know* the realities of his situation.

## THE PROCESS OF ACQUIRING RESOURCES

What are the activities entailed in acquiring resources? What behaviors does a principal exhibit in the course of this effort? What is the essence of his effort?

Since the principal is operating within a bounded environment, a major resource acquisition strategy is that of expanding the boundaries, i.e., pushing back the boundaries to create more space within which to operate. A number of stratagems or devices are available to him, perhaps limited only by his ingenuity and his willingness to employ them. Some tactics have become so time-honored that they often are viewed as norms rather than recognized for what they really are—attempts to expand the boundaries of the environment.

### Obvious Efforts

This category consists of means used by administrators in all fields to obtain heavier allocations of resources. They have become so ingrained in administrative behavior that their effectiveness may have been reduced. That is, their use has become so widespread that it is doubtful they may substantially improve the position of one sub-unit vis-à-vis that of other units. Two examples follow.

*Over-budgeting.* Since budgets are based upon estimates—both of need and of resources available—it is a very common practice to estimate needs higher and resources lower than is really the case. The dangers inherent in reversing this established practice need not be elaborated. In fact, danger also exists in estimating more accurately than do other competing sub-units since recognition by superiors of the existence of overbudgeting often results in initial across-the-board cuts of budget estimates. This may help explain the extensive communication among administrators at budgeting times or when new programs are introduced. It is an attempt to maintain existing inter-unit positions in resources acquired. If this occurs, an accurate initial estimate by a unit may very well result in the allocation of minimal resources and a deterioration of its position in relation to competing units. This effect may be partially offset by the rule-of-thumb resource allocations to units of a system, often seen in education.

*Projected Increases.* Administrators attempt to anticipate needs since budgets — which become expenditure plans—are constructed in advance. This usually entails attempts to predict the future situation of the unit. The most common method is to utilize projections of current conditions as a basis for predicting those of the future. An element of error is always contained in these projections. The projections may well be inflated or may be based upon erroneous assumptions. In either case, the net result is usually the provision of "evidence" of increased future needs that will require added resources. It is rare to find projections which result in a request for decreased resources.

### Subtle Efforts

If the principal is to acquire increased resources, he must make a case. If he has been particularly successful, the relative position of his unit in the organization will be enhanced. If this is accomplished, it really means that he has convinced resource allocators that his unit is somehow *different* from others. Acting upon this conviction, allocators have made additional resources available.

*Identifying Uncommon Elements.* This often-used technique can be seen in a number of examples in educational finance. "Isolation" allowances, transportation assistance, special funding for special programs, etc., all fit within this category. A growing concern for the special problems of a wide variety of underprivileged or disadvantaged groups could be cited. Each of these requests for special resource consideration rests upon claims that something differentiates this particular unit from the usual or common.

Sometimes the element of differences is far more apparent than real. The ability to verbalize the common in *an uncommon way* can be instrumental in acquiring resources. It is often difficult, even after close observation, to detect differences between ordinary educational programs and some others described as team teaching, continuous progress, flexible scheduling or non-graded. Other examples are some honors programs, guidance and counselling programs, etc. The point is that the principal who can restate the ordinary in a way which makes it appear to be unusual is well on his way toward acquiring resources for his operation.

*Rationalized Deceit.* Numerous communication studies have examined the transmittal of information from lower to higher levels. The information is usually distorted in ways which make it appear more favorable than might otherwise be the case. For example, favorable information is transmitted immediately, while unfavorable is delayed, favorable information is emphasized while unfavorable is de-emphasized. This is all a part of the desire to "put one's best foot forward" in an organizational context. The basic difficulty stems from the fact that all of the information available cannot —indeed, should not—be transmitted. The necessity for selecting relevant items thus often leads to distortion — the selective transmittal of information. (Weiss and Lieberman, 1956)

*Professional Knowledge.* A claim to professional knowledge can be utilized as a means for acquiring additional resources. It is difficult in education to derive quantifiable, objective data as a basis for practice. It then becomes necessary to place reliance upon qualified judgment. The principal can thus utilize his professional knowledge as the justification for his resource requests. Professional knowledge of staff can also be similarly utilized. (Kelley, 1951)

*External Factors.* A number of external factors can serve as bases for increased resource claims. One type is represented by peers in the field—the outside experts—who may be utilized to validate resource claims. Recourse to the literature is an example of this stype of stratagem. A second type is the utilization of fortuitous external events. Recognition by the Federal government of financial responsibility in the vocational education field was used in this fashion some years ago, to acquire certain resources for vocational education. A sudden upsurge in the economy, triggered by industrial development, might also be seized upon as a time to build a resource base.

*Aspiration and Mobility.* These factors, whether present in the staff, the principal, or both can be turned to advantage in acquiring resources. It should be recognized that desire to retain these individuals in the district must exist if these factors are to be effective. However, knowledge that a desired individual is ambitious and mobile will result in different treatment—including allocation of resources—than that accorded someone who is seen as willing to do anything in order to remain. It is not essential, then, that an actual threat to move be made; rather maintenance of an image of willingness to leave is the important point.

## CONCLUSION

A major and vital component of the job of any administrator is that of acquiring resources for that portion of the operation for which he is responsible. Resources are the lifeblood of the unit; in their absence the job cannot be done. To the extent that required resources are limited or inadequate, the work of the unit is affected and output is restricted.

Resources in any organization are scarce commodities. The organization must compete with other organizations to acquire them. This same competition exists among the sub-units of any organization — each striving for a greater share of the available resources. Yet this competition must occur within a framework of rules and norms which cannot be violated with impunity.

Each administrator works in a situation embodying both obvious and subtle factors. The obvious resources are those which directly bear upon the job to be done, the subtle factors are those which may be employed to obtain a larger measure of the available resources. To the extent that the administrator can discern and mobilize — upon behalf of his unit — the subtle resources, he is more likely to acquire those obvious resources essential to the operation. In the process, he thus discharges his prime responsibility, the acquisition of necessary resources to get the job done, the job that is the purpose for the existence of his unit.

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# RESOURCE ALLOCATION: A DETERMINANT OF ADMINISTRATIVE SUCCESS

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## INTRODUCTION

This paper, and the preceding paper "Resource Acquisition: A Basic Administrative Task" are companion papers. Statements contained herein are applicable to all levels and types of administrative positions. If the leader successfully expends available resources of talent and energy to acquire people, materials and space, then a subsequent and equally important task is the allocation of these resources to the various sectors and members of the organization or unit. It is through the judicious distribution of essential resources that the leader attempts to move the organization toward its goals. His accountability as leader is fixed in how efficiently and effectively the resources are employed in goal attainment efforts. Successful allocation of resources depends upon establishing a basis for distribution. Too often misconceptions and questionable assumptions form the basis of distribution strategy, obstructing rather than facilitating the organization's work. A number of subtle contributing factors, if recognized at all, come into play primarily as the result of serendipity rather than conscious action. It is important that the administrator be as aware as possible of all aspects of the factors upon which he bases such important decisions as those of resource allocation.

## OBVIOUS MISCONCEPTION AND TENUOUS ASSUMPTIONS

Misconceptions can be dangerous when the communication process is complicated. They are even more of a problem when both parties to a transaction possess different—but inaccurate — preconceptions. Assumptions are dangerous primarily when they are not recognized as such but are mistaken for facts. When assumptions are recognized as assumptions, the necessary substitution of others is not traumatic. Brief mention of some of these factors, which structure the situation for the allocator, follow. Their effects should be readily apparent.

*Equity of Formulae.* Those who are recipients of resources often believe, or pretend to believe, that the allocation of resources is based upon some common formula that is fair and equitable. Generally, the common formula is perceived to be dictated by a set of underlying basic principles, the primary one being that of equalization. Equalization may be an equal division of resources among all members, or it may be the provision of more resources for those with the greatest need. Obviously, the real meaning of the term is often not specified, which leads to confusion among those concerned with resource allocation. Furthermore, the specific dimensions of inequality which are being treated are often vague and ill-defined. Resources are then being allocated on the basis of intuition more than on a rule of equity.

*Rationality of Formulae.* It is further believed that formulas, written with some set of mathematical symbols, are based on pure reason, are both immutable and impersonal, and thus eminently just. Such *apparently* rational formulas give consideration to such factors as teacher/pupil ratios with additional weighting often given for the level of school involved, e.g., a given per cent to be added for junior high over elementary and a higher percentage for senior high than for junior high. The formula may even go so far as to consider the percentage of students enrolled in highly-specialized subject fields. The example illustrates the *irrationality* of the approach. Granted the teacher/pupil measure is a reliable and accurate measure, its meaning in terms of instructional outcomes is unknown. It becomes a nonsense symbol. It could be contended that the appearance of rationality is not materially equivalent to being rational but may well be *designed* for administrative convenience and security. In the absence of certainty, an image of certitude can do much to forestall questions and reduce unrest. It may be far easier to prevent the articulation of awkward questions than to deal with them once they have been asked. This is not necessarily a criticism of the image-maintenance strategy since, while the allocation is not really based upon rationality and impersonality, neither are all requests for resources based on rational and impersonal needs.

Action demands impinge upon the administrator from all sides. The nature and frequency of these demands indicate that many believe the old saw, "the squeaky wheel gets the oil". This fact, in itself, may force greater effort to apply reason and impersonality as a means for achieving equity in allocation if for no other reason than self-defence for the allocator. This means that, to a degree, allocation is a political process in which the appearance of need — which might be accomplished through such stratagems as persistence, repetition of demands, overstating the case, etc. —is an important factor in determining the nature of the resulting resource allocation.

The individual who relies only upon a simple statement of need or on rational argument may well find his needs neglected in favor of another who uses not only the rational but also the personal and emotional approaches. This stems from the often-stated difficulties in measuring and quantifying needs in the field of education. Sole dependence upon rational argument is tantamount to utilizing only one weapon in an arsenal.

*Priority Setting.* It may be thought that priorities are set by the users. To a degree this is true, but only to a degree. The user establishes the first set of priorities when he states his case. It does not necessarily follow that this preliminary set will be an exact replication of the final set. Too often the initial listing of resources needed and the setting of priorities is part of a game in which both users and allocators engage. The user will generally request more than will be needed, knowing full well that as the requests move up through the hierarchy, each level will exercise its prerogative to reduce amounts. This may well be a remnant of an older bartering society. It also suggests the difficulties encountered in attempting to resolve problems through use of vague and indefinite data. At the same time, this procedure seems to show that it is the superior who makes the final determination.

While it may be true that each superior determines some portion of what will be allocated, he in turn is subject to political and social pressures beyond the confines of his immediate position. He is not completely autonomous in determining the allocation. Plekhanov notes in "The Role of the Individual in History" that the leader, even the great one, is only able to function if the group he leads permits him to do so, so that while the subordinate may perceive the superior as the one who determines "who will get what," he in fact is constrained, as are his subordinates. The constraints may be less obvious but they are nonetheless real. In essence, leadership is a function to be performed. It may be performed by various members at different times. Leadership acts help a group achieve its objectives. The person who can facilitate goal achievement is viewed by the group as a leader. (Bavelas, 1960: 491-98) All members of an organization are in a reciprocal relationship.

*Finite Resource Limits.* It is also a common misconception that individual allocators are knowledgeable as to the amount of resources that are available at any given time and that this limit is fixed and immutable. While most people would agree that available resources do have some finite limit, it is doubtful that any organization is fully aware of the precise nature of its resources. For example, consider the resource of people in a school district. The records on file in a central office contain only the hints of an individual's interests, experience and academic background. The quantified data conceals more than it reveals. The hidden talents that could be utilized are largely undetermined. Even those human resources that are recorded seldom are categorized into a master file system so that information may be readily located when needed. This notion may be pushed further into the more concrete areas of physical space and equipment. Even here, the knowledge of what is available is limited and faulty in most organizations. In the absence of complete and accurate data, the allocation of resources must necessarily be inequitable since not only are the true needs unclear but, also, the extent of the resources being allocated is unknown. Furthermore, the administrator who meekly accepts a stated limit as "truth" is failing to fulfill his resource acquisiton responsibility.

*Will of the People.* At certain times in history, political writers have contended that the "will of the people" is the only legitimate basis for action. This includes such acts as allocating resources to societal institutions. While in a democratic society the "will of the people" is difficult to detect, it may be judged to be an even less viable concept in determining the nature of the people's will. (Thompson and McEwen, 1962: 474) What does society wish for the organization? What, in fact, do organizational members wish for it? What percent of the population speaks for the people, and who is the interpreter of what is said? To believe fifteen million Frenchmen can't be wrong is to be ignorant of French history. If the true will of the people, however, could be ascertained, then the odds in favor of them being right might improve.

Al Capp, some years ago, had Li'l Abner attend Phogbound University which had been established by good old Senator Jack S. Phogbound at the request of the people of Dogpatch. Of the ten million dollars expended on the Dogpatch campus development, $999,999 went to erect a statue to Senator Jack S. Phogbound. While the example is facetious, it exemplifies how resources can be allocated based on interpretations of the people's will.

*Sanctity of Precedent.* In much the same way there is a misconception that when a precedent has been established, it is sacred. In a pragmatic sense it should be viewed as sacred only so long as it works and should be discarded when it ceases to function. It is not uncommon in educational institutions for allocators to say, "We provided (X) amount of wax last year to keep up the floors and they always look nice, so even though you have added an adult education program in the evening, we see no reason why the same amount of wax won't do." Precedents are similar to policies, providing guidelines for the routinization of decisions about similar cases. Precedents are employed to conserve resources otherwise devoted to repeatedly "solving" the same problem. However, when precedents become firmly fixed, it is tantamount to sacrilege to suggest they no longer apply—whether because of changed circumstances or because of the emergence of a truly different problem. They may thus deter rather than facilitate the allocation process. The allocator must assure himself that the precedent itself is appropriate to the situation before relying upon it.

*Effect of Quantifiability.* When resources are quantifiable, as in the example of the wax, it is less difficult to achieve rational allocation than when resources are not so easily calculated. Measurement of human resources is a difficult task, as is measurement of the resources used as input to develop the human resources. (Innes, et al. 1965: 1-4) Some resources, such as creativity, high motivation, and expertise, are nebulous concepts, at best, and yet administrators attempt to obtain teachers and service personnel who have these qualities. The problem faced is that of locating the possessor of such qualities and determining the degree to which the quality is present. The assumptions underlying the search for creativity and talent has typically been translated into statements which postulate direct relationships between the type or quality of the resource to be obtained and used and the end to be achieved. If the quality is high, the end will be good and if the quality is low, the end will be poor. While this may be verifiable in such cases as gasoline and engine performance, it cannot be ascertained with any degree of certitude in the case of a "superior" teacher working with "superior" students. Many authorities suggest that the very best teachers should be used with the average and below-average students to stimulate them to greater effort. The truly superior child needs other kinds of resources, such as books, laboratory equipment, and special resource persons at particular times, more than he needs a teacher with him during each period of every day. Thus the quality of a resource is a difficult factor to quantify.

Quantity has also been assumed to have a direct relationship to increased performance. (Ross, 1958) The more dollars a district provides, the higher the quality of education. Carlson, on the other hand, failed to find a corresponding relation between the amount of money allocated per pupil and the rate of innovation in Allegheny County, Pennsylvania and the State of West Virginia. (Carlson, 1965: 61-63)

*Government Role.* Finally, there is a serious misconception that senior governmental organizations can be relied on to support continually increasing resource requests. This has been proven untrue in many places in the United States as early as four or five years ago (James, 1967) and sufficient evidence should be apparent to anyone in Alberta at this time that a continual increase in resource allocations may no longer be the case here. If government reduces its support, the concept of resource scarcity will be forcefully brought home.

Up to this point several obvious misconceptions and tenuous assumptions, generally held regarding allocation of resources, have been described. In the next section a few of the more subtle factors recognized by the astute administrator are identified and discussed.

## SUBTLE CONTRIBUTING FACTORS

*Measurement Problems.* By taking advantage of the inherent difficulties in quantifying resources, an administrator can obtain adequate amounts of materials and goods to meet the needs of his organization. One method employed is to overestimate the needs of the students to be served, the materials needed, and the ends to be achieved. This capitalizes upon the measurement difficulties encountered by resource allocators. Over-estimation alone, however, is singularly unconvincing, for it is usually required that some type of evidence be provided to substantiate the estimated figures. Statements showing the number of students served and teachers employed as well as the amounts of material used and degree of progress towards the established goal during the previous year are common. The desirability of the stated level of resource needs can be supported by comparison with national averages, or data from other districts, schools or classes. Although the comparisons may be based on the same data sources, a higher resource level may be requested by a specific administrator and supported by sufficient charts and numbers to afford grounds for approving this requested level of resource support. If accurate measures of results were possible, the required substantiating information would need to be more rigorous and verifiable. Thus the measurement problems in education result in a degree of beneficial inexactitude while the numbers usually applied help to conceal this fact.

*Goals and Means.* While it is difficult if not impossible, at this time, to measure many of the resources used in education, it is equally difficult to identify relationships between the means employed and the degree of success in attaining specifed educational goals. If a causal relation were established between the means used and the resultant progress toward goals, requests for additional resources would of necessity become more exact and precise, and more explicit distribution formulas could be devised. For example, educators have espoused the dictum of educating the *whole child*, but this is a rather nebulous ideal to which they aspire. It has no one clear path to follow. Educators try one method after another, only to return to ideas tried and rejected previously. This is simply further evidence of the extreme difficulty experienced in trying to apply scientific method to inexact data. More resources are often requested for experimental innovative programs than are needed. It may be questioned if the underlying purpose of the introduction of innovations is to move the student to his potential or if the hope is that the resultant novelty may reduce the boredom of routine behavior. The assignment of means in this case implies at best a facilitating process, which may have some utility in its own right, rather than a *direct* relationship between means supplied and results obtained. The path between goals and the means used to achieve them is not only tortuous rather than direct but it is also obscure rather than clear.

*Use of Resources.* It is assumed by the allocator that the resources will be used for the designated purpose. For example, if a camera is requisitioned by a principal, it is assumed it will be used by the science and art classes and not for the principal's vacation to Hawaii. If it is known the principal is taking a trip and such a request is made, the request may be refused or the purchase delayed until after he leaves or returns. In this case the allocator may recognize the intent of the request as having a bearing on the academic program but also as being aimed at fulfillment of a personal aspiration. It also recognized that while the resource may be ordered with the intent to fill a designated need, it could also later serve one or more of the personal purposes of the organization members. There are also instances in which the original request comes from someone who has since left the staff. The replacement staff member may lack the knowledge to properly use the allocated resource or not want to use it. In many cases, underlying reasons for a resource request cannot be ascertained with any degree of certitude by the allocator. Due to this lack of knowledge he is required to grant many requests on good faith. This good faith may continue as long as there is no evidence leading him to do otherwise.

*Resources as a Control.* One of the most subtle factors operating in the allocation process is the use of resources to control the behavior of others. If the subordinate has displeased his superior, the superior has the power to cut off some or all of the subordinate's supply of materials and goods. The superior may, even more subtly, supply needed resources to a critical point and then not provide the necessary remainder, leaving the subordinate in a position unable to finish the project. The allocator may also allow enough of the needed materials to be obtained so as to never quite discourage but never actually encourage the subordinate to continue.

Resources are also a means by which loyalty, co-operation and confidence are obtained by the superior from the subordinate. Resources are used as rewards for loyalty or co-operation or to lure a prospective employee from one organization to another. One authority has written, "Management controls like budgets tend to make the employees feel dependent, passive and subordinate to management." (Argyris, 1966) While the allocator has such power, he must not employ such tactics indiscriminately for if production is decreased to a critical point or if too many subordinates indicate dissatisfaction, the allocator will find that he is at odds with his superior.

*Political Processes.* The social network, the pattern of personal linkages with others within and outside the work unit, represents one aspect of the political process of resource allocation. While the identified real needs of a subordinate may, in part, determine how resources are allocated, the effects of political pressure to satisfy some former obligation, to acquire a new bridge in the communication network, or to open new sources of resources either directly or indirectly, should not be underestimated. The political process is a useful means for resolving problems when exact data cannot be obtained. In the absence of hard facts about needs and results it is probably the most valid method for determining resource allocations. The subjective information available from friends and associates can be utilized in arriving at difficult decisions. In some cases such a process is perceived by the superior's group as being unethical or a betrayal of trust, while in fact it is a maneuver to obtain more resources to allocate to them. (Blake et al., 1964:28)

*Rationalizing Failure.* Given the above factors, it should be realized that the administrator who acquires resources is also the one who allocates them. If by a series of steps he can convince his superior that he is achieving the set goals and efficiently using the resource provided, then both he and the other members of the organization may devote themselves to their primary task. They may also take the opportunity to indicate to the superior that if they had more and superior resources, the results would even be better. On the other hand, if the group experiences failure in the task, it can claim that if it had been given what was requested, it would have been able to succeed. Rationalizing failure by claiming a lack of necessary resources may actually help a group cope more effectively with its problems and assist it in reaching more realistic solutions by maintaining the group's unity; the claim may act as a "face-saving" device. If, however, *real* solutions are not eventually reached, then the group will experience a transition of leaders.

## THE TRIBAL CHIEFTAIN AND THE PRINCIPAL

While there is no direct evidence detailing how the first chiefs were selected to lead the band, there is inferential evidence (Lee and Devore, 1968) that while the overwhelming percentage of a hunting/gathering tribe's sustenance came from gathering by women and old men, the hunter was held in greater esteem. Whether this was due to the danger entailed or the relative scarcity of meat over nuts and roots, meat was given greater value. What is important is that while those men who were the bravest and most successful hunters often were made leaders of the tribe, not all the needs of the tribe could be satisfied by a hunter. Some of the leadership was therefore held by a medicine man who could meet the psychological needs of the people. Each leader was essentially a resource provider, able to provide a certain sense of safety and security from either the physical environment or from the spirit world. Each retained that leadership as long as he was able to solve the real and perceived problems of the group. (Cohen and Bemis, 1961; Jackson, 1953; Whyte, 1948)

The principal today may be viewed as a modern huntsman whose job it is to secure the necessary resources of people and things and to hold the tribe (the school staff) together so that organizational goals can be achieved. To do only this will not result in success. He must also assume the other resource-providing role of his ancient counterpart, the medicine man, who was able to ward off the fears of the unknown, to show the group that they are under the protection of a great spirit (Carlson, 1964: 262-276) and to assist each member in realizing his own goals as a person and as a member of the group. (Maslow, 1954) This provision of resources is the allocation function of the leader.

## THE BEHAVIORAL IMPERATIVES OF THE LEADER

To perform as this modern-day huntsman, there are several behavioral imperatives required of the leader. The most obvious imperative is that of maintaining the operation of the organization at some minimal resource level. In many cases schools have, over long periods of time, continued to survive on the barest minimum of inputs of people and materials. This level of basic necessity is a relative factor. We may say that the level of resources needed is in direct relationship to the level of expectation of the members of the organization and to the levels of expectation and aspiration of the people served. When a threat or strain is bearable, the leader will be allowed to continue, but when minimum expectations are not met, he will be replaced. The behavioral imperative, then, is to maintain resource provision at a slightly higher level than required by the basic needs of the group. In concert with this imperative is the need to continually foster the *appearance* of improvement or betterment in the level of available resources. Even though a group may be on a subsistence level, it may continue to persist as a unit as long as the members feel they are moving ahead. This effect may also be achieved by perceiving the condition as better than that of another comparable group. Disaster research studies have shown that after a tornado or hurricane, those people who have lost their homes and several of their family will say how well off they are compared to another family in which not one member has survived. Existence in this case is better than non-existence. The administrator who can continually show his group how they are better off today than they were yesterday and how others are in worse shape, is demonstrating one of the behavioral imperatives.

When a group perceives its leader as unable to solve the crisis problems, he will be replaced. (Hamblin, 1958: 331-335) A prudent leader may circumvent this move by involving the group in deliberation with him on possible solutions to the problems. By utilizing a democratic process, the leader is sharing not only the decision making function but is implicating the group in the result; as they share in the decision making they share in the responsibility for the decision. By sharing his power with his subordinates, the leader is providing another kind of resource to the group as a whole. He is meeting some individual needs to be involved. He is building strong commitment to the group. He is also increasing his own power.

Another of the obvious behaviors of the leader is that of telling the subordinate what is expected of him. In outlining the expectations to the subordinate the superior is, in part, revealing what kind of a person he is himself, what he feels is most important, what level of autonomy he will permit the subordinate to assume, and what discipline—reward and punishment—will occur. If the subordinate complies with the superior's request and the result is a fiasco, then it is the superior who is expected to take the blame. This is a security resource for the subordinate. (Anderson, 1966: 27-28) He feels free to function as directed when he knows he will not be made the scapegoat. Accompanying this concept of the leader assuming the blame is the expectation that the leader will share the glory if things go well.

To be able to function adequately as a resource provider, the leader must possess certain kinds of information. He must be knowledgeable about the larger framework of rules and regulations in which the group works, to correctly interpret where these rules can be ignored or bent, (Lane, et al., 1966: 221) and to accurately predict the consequences of rule violation and failure, as well as the outcomes of success. He must also be able to show a subordinate how the subordinate can attain a satisfactory match between his own goal aspirations and the goals of the organization. Such information and its communication is the foundation of the resource provider's organizational behavior.

*Subtle Behavioral Imperatives.* The difference between the "ought" as noted above and the "is", to be discussed below, is the difference between the obvious behavioral imperatives and the subtle ones. While it is recognized that no leader works independently of others, it is sometimes the case that the leader will attempt to assert his own individuality on the group in a very overt manner (e.g., Bismarck, "Ich and Gott"). This is effective, however, only with strong charismatic leaders. In most instances, the leader is not strong enough to succeed and so uses more subtle means of placing his imprint on the organization.

There are many tactics a leader may employ to move an organization in a predetermined direction. The most common practice is to have, or to claim to have, a mandate from a superior to reorganize or to introduce innovative methods. The leader may also, through apparently democratic procedures and the control of the agenda, move the group in the direction that reflects his position. This involves control of the topics discussed and the direction of members' energies to only the problems defined. The superior may utilize an external threat (Hamblin, 1958: 322) to the organization, or create a real or apparent threat to provide an avenue through which to insert his own image and likeness. Whichever subtle ruse he employs, the result is the shaping of the organization to his own ends. If the leader is to be the principal resource provider, he must focus his primary attention on his own unit so that it will become more dependent upon him and so that it will move in the direction he determines.

The leader must exercise caution, however, if he is to retain his position. While the leader is expected to take the blame for failure and to share his glory with the subordinates, if he assumes the blame too many times, he has implicitly admitted that he does not know and cannot predict either the appropriate course of action to be taken or the results. To avoid this interpretation by the group, in a number of subtle ways the leader may in fact relocate the blame for failure. He may explain how extenuating circumstances, which could not be perceived in advance, prevented the expected results. He may present selective facts (in ethics this is called a mental reservation) to absolve himself of blame. If he has employed democratic procedures, he can say, "We are all to blame for not foreseeing the problem," or as a pedagogue, point out how the group can learn from its mistakes. If the threat to the group is too great, then and only then, may the leader select and sacrifice a scapegoat. The goat is generally the most expendable and the least revered member of the group. This might be termed the Caiaphas Syndrome, "It is better that one man be sacrificed than that the whole nation be lost." A serious error, however, is made by the leader who indiscriminately uses a scapegoat approach, for the unity of the group will suffer.

Another form of scapegoat is found in undermining one's competitors, whether they compete with the leader alone or with the group. Any time a "we-they" situation can be created, the "we" group becomes more homogeneous and is better able to function in performing specified tasks. At the same time, under "we-they" conditions the group also lacks creativity (since emphasis is upon conformity) and fails to give sufficient thought to decisions that are made. In essence, the leader takes the blame often enough to hold the group's commitment but not so often that they lose confidence in him. He sacrifices members often enough to ensure that co-operation is worthwhile. Co-operation can also be secured by promoting (rewarding) a subordinate over those who might expect promotion or by creating a sinecure position for one who poses a threat to the leader. Firing or retiring one or two who are purportedly attempting (whether they really are or not) to sabotage the leader (Gouldner, 1950, 1954) is also a protective tactic. It is implied here that loyalty and co-operation are achieved by reward, threat or censure. (Jay 1967: 201-205; Machiavelli, 1961: 95-98)

One of the most subtle forms of leader behavior in controlling the organization is found in selective transmission of information. (Hagman, 1955) Edwards (1962) notes that messages are screened and accepted, or ignored and rejected to the extent that the acceptance or rejection promotes cognitive consistency. That is, people are more concerned about information that is related to positions or situations in which they find themselves at present than to situations or problems that they may face in the future. The astute leader also realizes that some persons are easier to persuade than others, regardless of the message. It has been found that subordinates who are less emotionally stable are more easily induced to change their opinions than those who are very self-assured and confident. Subordinates are also more likely to be influenced by information which more nearly fits their own needs and expectations. This is also true of messages which tend to conform more nearly to patterns of verbalization to which they are accustomed. (Schramm, 1962) It has also been found that only the most relevant information should be passed on to subordinates, for if the information isn't relevant to their particular needs and job requirements the receivers will screen it out. (Guilford, 1957) Those messages which are concerned with personal matters of retirement, sick leave and job security, promotion, company operation and service award, are most popular and most often remembered by recipients. The least popular items are those that involve civic activities, the institution or industry in general, regulations and legislation concerned with the larger organization, information regarding the personalities of company executives and those of state, provincial and national governments.

## CONCLUSION

The processes of allocation of resources and acquisition of resources are intertwined. People or organizations with more resources —due to allocations resulting from previous successful acquistion efforts—are in a stronger position to acquire more than are those with less resources. Administrators who have acquired added resources are in a position to allocate these in a manner which will demonstrate the effectiveness of their work with an aim to acquiring still more resources in the future. In other words, there exists a continuous cycle of acquisition and allocation endlessly repeated unless the organization ceases to exist. Unsuccessful efforts at acquiring resources reduce the amounts allocated, leaving less to be distributed at the unit level as well. The unit is also placed in a less advantageous competitive position for future resource acquisition efforts.

The two processes—acquisition and allocation—are also, in a sense, parallel since they consist of both obvious or readily apparent factors and of subtle factors which are often overlooked. The subtle factors are nonetheless important and are overlooked to the detriment of the organization. The administrator who sets himself to the task of dealing with the full range of factors, both obvious and subtle, is the one most likely to succeed in obtaining the resources so vital to the effective functioning of his unit.

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# THE PRINCIPALSHIP: CHALLENGE AND PROSPECT VIA EVALUATION

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## INTRODUCTION

Evaluation in education can be described as a new subject with a very old history, for evaluation under various guises has been with us for a long time. To date, one could characterize evaluation in terms of examinations, and more specifically, terminal testing. The focus of attention was clearly the student, and perhaps there is nothing wrong with that, providing other areas of concern are not neglected. The newness in evaluation stems from a renewed and vigorous attempt to take into account all elements of the educational enterprise. This awareness is evidence of an increasing recognition that evaluation has a wider role to play in the educational scene, and that the application of appropriate methods of evaluation is an essential component in the development and operation of successful instructional programs.

My task is to lay down some ground rules about the field of evaluation, to indicate the questions such a stance suggests, and to furnish some information about the methodologies employed to answer those questions. The following papers by Dr. Hersom and Dr. Maguire deal more specifically with uses of evaluation in curriculum implementation and the measurement of student achievement respectively.

At the outset, let me issue a warning. What we offer is not put forward as a panacea for all the challenges and problems facing you in the schools today. Our contributions will indicate ways of addressing those problems in a systematic and fruitful way. We suggest some starting points, provide some guidelines, and even some solutions but you will ultimately determine the usefulness of these ideas when you resume your principalling duties.

As much as we would like, we cannot start completely afresh, so our message has to be considered in the light of existing circumstances in education. Some of these circumstances are briefly discussed below, not just to form the backdrop for this and the following papers, but to show how evaluation in the broadest sense can help relate our activities to those circumstances. This connection will be attempted in the concluding section of this paper.

## THE CURRENT VIEW OF THE PRINCIPALSHIP

The first of these elements is what I have called the current view of the principalship. One could start, as one writer did (Erickson, 1965), with Cubberly, and run a similar gamut through to the present. Such a treatment may be useful, for the past teaches us many lessons. But here, I am more concerned with the contemporary view, and that can quite reasonably be traced from more recent times.

At the beginning of the 1960's an image of what the principal ought to assume as his sphere of operation was projected by Reeves (1961) and Downey (1961). Their descriptions were based on an earlier article by Katz (1955). They suggested that the educational leader had at least four specific roles to play: that of an efficient business manager, a leader of people, a curriculum developer, and an agent of organizational change and improvement. Associated with these roles were certain skills which were called (a) technical-managerial skills, (b) human-managerial skills, (c) technical-educational skills, and (d) speculative-creative skills.

This view of the principalship received wide acceptance when it was first articulated, and it is the view that most of us would ascribe to today. But there have been differing opinions about the extent to which a principal is a consultant as opposed to an evaluator in his relationships with teachers. The crucial issues in this debate were fully explored by Bargen (1965) and Enns (1965). Despite these kinds of differences, there still remains a recognition of a diversity of roles like the one projected by Downey who says ". . . the wise principal will strike a balance among *all* roles and pay attention to the development of *all* skills. This is the first and most obvious implication of the rationale." (Downey, 1961, p. 14).

Undoubtedly there are many factors which affect the process in, and the products of our school systems; probably none is more important than the educational leaders who have responsibility for recommending changes in educational policy, for motivating teachers, for determining curriculum and for facilitating learning. Principals are not only in strategic positions to shape the direction in which educational institutions move, but they also play significant roles in affecting the performance level of these institutions.

## PRESSURES ON THE SCHOOL

The principal finds himself at the centre of a complex set of interactions. While he uses his organization as a resource, he finds himself unavoidably restricted by its limitations, affected by its characteristics, and moved by its capabilities. However, there are more than intra-organizational factors determining his role; therefore it is necessary to consider other matters which impinge on his office.

*Expectations held for the School.* As a result of abnegation, default, or choices made by other agencies, the school appears to be drawing unto itself many of the socializing processes once felt to be the domain of the home, the community or the church.

No longer is education seen as an enterprise set up to meet local needs; its mission is said to have national and even international connotations. Indications of this are given explicit expression by statements recognizing education as a national resource. Undoubtedly such a feeling is influenced by the uncertainty of the world situation, the space race, aggressive competition between opposing value systems, and the importance attributed to education by emerging nations.

*People pressures.* Demographic factors add a further dimension. The growth in population, but more importantly, the tremendous population mobility of today are creating difficult and unexpected educational problems. These factors have resulted first, in a higher percentage of the total population in the school-age group, and second in the continuous movement of people to large urban centres.

*Knowledge pressures.* The rapid growth of automation and technology raises serious questions about the suitability of today's educational goals. Michael (1962, p. 41) suggests that the pace of change was once slow enough to allow a comfortable margin of compatibility between the adult worlds and the one children were trained to expect. This comfortable margin is no longer present, for it is becoming increasingly difficult to predict the needs of future citizens of dynamic societies. The choice of what to include in the educational diet has to be made in the face of conflicting values from society as well as the demands of subject matter itself. Some useful suggestions have been made in approaching this dilemma through using the structure of the major disciplines and their processes of inquiry (Downey, 1965, pp. 96-7). Parker and Rubin (1966) propose what they call a "process as content" view of education, in which the chief aim is the development of expertise in the skills and strategies of all forms of inquiry. Kliebard (1968) tends to support both the knowledge aim and the method aim when he argues that to select educational goals from the social milieu is dangerous, because of the fluid nature of society; instead, he proposes, aims should be found in the field of study itself.

*Student pressures.* We are constantly reminded of increasing pressures from students. We are told that much of the restlessness in youth is the result of failure on the part of educators. I do not agree with making educators the scapegoats. Perhaps we are not performing up to capacity but I doubt that our influence, or the lack of it, is the sole determinant of the disillusionment of youth. The kaleidoscopic variety and intensity of communications emanating from the mass media, the values of our affluent society, and peer group influences, are extremely potent forces in the shaping of student attitudes. These are not mentioned to excuse any shortcomings of the educator, but to note that he is in competition with a number of other agencies for his students' attention.

*Public pressures.* In Alberta at the present time, public interest in education is running at what may be an all-time high. Two of the factors which have contributed to this state of affairs are the work of the Educational Planning Commission under the direction of Dr. Worth, and the Provincial Government's recent statements about the future financing of education. The first of these has in effect provided a vehicle for public debate of basic educational questions. Interested parties have raised pertinent issues and suggested some marked changes which could vitally affect the educational system of this province. The second may, in part, be a sign of the economic times, but it is also giving recognition to the taxpayer's unwillingness to provide education with all the financial support that some of us think is its due. Perhaps the taxpayer's hesitancy is attributable to the natural aversion to buying a pig in a poke. Asking the taxpayer to put out money year after year in ever-increasing amounts for vaguely described products having even more vaguely described costs attached to them places a rather heavy strain on this credibility. Perhaps we should marvel at the fact that the taxpayer is so generous, rather than complain at his seeming parsimony.

*Professional pressures.* Challenges do not all originate from outside the educational sphere. Presently, there is a great deal of pressure from thoughtful critics within the ranks. Concern is expressed about the educational lag, which essentially, is condemnation of the gap between "what is," in the classroom, and "what could be," in the light of our present knowledge about learning theory, the development of children, and the like. Hopefully, there are means available to narrow this gap through improving pre-service and continuous inservice education of teachers, by adoption of new practices for pupil organization which facilitate individual instruction, and by improved methods of staff utilization. While the onus for some of these may rest on agencies outside the school, the principal cannot escape the challenge of the constant reappraisal of the "how" of education.

So much for the various pressure impinging on the school. I would like next, to discuss some of the weaknesses in the uses of evaluation to date. These shortcomings are illustrated by the apparent failure of evaluation and the myths of evaluation.

## THE FAILURE OF EVALUATION

Failure is rather a harsh word in the context of education, but Guba (1969, pp. 29-38) feels that in the light of a number of symptoms such a charge is not unwarranted. His article may in fact be a deliberate attempt to jolt us out of our complacency and force us to take a critical look at where we stand. A brief resumé of the points he raises follows.

He lists six factors which seem to him to indicate the shortcomings of past efforts at evaluation in education.

1. *Avoidance.* A certain sign of evaluation's failure is that everyone avoids it unless it becomes painfully necessary.

2. *Anxiety.* There have been a number of ambiguities in the evaluation process. Since so many elements of that process are badly understood, the particular evaluation applied may yield random, meaningless data. Not one of us feels particularly happy if judgments are made about our programs, our decisions, or our effectiveness by what may be a random process.

3. *Immobilization.* Despite the opportunity that has existed in our decentralized school systems for some decades, educators have not responded to evaluation in any meaningful way; indeed, the mere existence of an office or functionary within the schools charged with systematic evaluation is still rare.

4. *Vague guidelines.* The lack of guidelines for evaluation is notable. The guidelines are subject to very wide interpretation, and offer little operational assistance to the persons charged with making evaluations in education.

5. *Misadvice.* Evaluation consultants, many of whom are drawn from the ranks of methodological specialists in educational research, fail to give the kind of advice which the practitioner finds useful.

6. *No significant difference.* Perhaps the most crushing evidence which indicates that evaluation is in trouble is the fact that so often it is incapable of uncovering any significant information. Over and over again comparative studies of alternatives in education have ended in a finding of "no significant difference." Several responses could be made to this situation. It could be said that educators are incapable of devising any approaches that are better than those things they are already using. But if this is so, we ought possibly to applaud their remarkable consistency, since the alternatives devised do not appear to be any worse either.

## MYTHS OF EVALUATION

Let us not overlook the fact that there have been, and still are, several myths associated with evaluation. A passing reference to several of them will be enough to indicate that our approaches to evaluation in the past can be found wanting.

In the last few years we have become familiar with a process called self-evaluation. This idea has been suggested as applicable to both students and staff. For the former, it is said that the student above all others, has the capacity to evaluate his own performance. If one takes the line of argument supporting such a position to its logical conclusion, one is forced to admit that the student is making judgments about the choice, arrangement, and ordering of subject matter, as well as the appropriate learning situations for his optimum development. Despite the extreme confidence of modern day youngsters, to anoint them with such a level of educational sophistication seems to me unrealistic. A sixth grade student, for example, does not have that kind of know-how, and to foist that kind of responsibility on to him is tantamount to abnegation by teachers of their responsibilities.

For teachers, the application of the notion of self-evaluation has meant the filling out of numerous checklists. The lists indicate the use made of facilities and services, the instructional methods employed, and some descriptions about the roles played by various members of the school organization. This kind of evaluation may provide some feedback for the teacher, but the reliability and validity of the picture is suspect. Those of you who heard Dr. John Goodlad speak in Edmonton this year will recall him describing a recent study in which it was found that teachers' perceptions of what they think they are doing are markedly different from what an external evaluator perceives them to be doing. This emphasizes the point that when an observer is himself the subject of the observation, his view may be through rose-tinted glasses.

I do not mean to damn all use of the self-evaluation technique; my argument is with those who suggest it as the best or the major way of evaluation.

One other myth I want to refer to is that which says that administrators should not evaluate teachers. They can, they do, and indeed they must. Admittedly some do it very badly, but to suggest that the administrator cannot wear two hats, that of the evaluator and the educational leader is patently false. To successfully play the role of the one without the other is a contradiction in terms.

I have painted a bleak picture, but I have done so intentionally, because unless I can convince you of the need for a re-evaluation of evaluation, we are likely to proceed as before. And that means, I think, that we shall be under-achieving in our endeavors. In presenting such a dismal view, I have painted myself into a corner. I hope for your sake and mine, that I can get out of that corner with some degree of respectability.

The notion of evaluation has been viewed in several ways. These are worth recounting because they shed light on current interpretations of evaluation.

## PAST VIEWS OF EVALUATION

Evaluation, like any analytic term, may be defined in many essentially arbitrary ways. Guba suggests that each of the ways which have gained common acceptance have certain utilities and certain disadvantages (1960, pp. 31-4).

An early definition of evaluation tended to equate the term with measurement. The instrumentation developed by measurement experts provided the conceptual basis for evaluation. The use of measurement devices resulted in scores and other indices that were capable of mathematical and statistical manipulation, which in turn made possible the handling of masses of data and the easy comparison of individual or classroom scores with group norms.

But this view has disadvantages. First, evaluation was given an instrumental focus; the science of evaluation was viewed as the science of instrument development and interpretation. Second, the approach tended to obscure the fundamental fact that value judgments are necessarily involved. Third, evaluation tended to be limited to those variables for which the science of measurement has successfully evolved instruments. Other variables came to be known as "intangibles," a characterization which was equivalent to saying that they could not be measured, hence had no utility and ultimately no importance. Thus the limits placed upon evaluation because of a lack of instrumental sophistication came to be viewed as the real limits within which evaluation had to be contained.

Another definition which has had great currency is that of determining the congruence between performance and objectives, especially behavioral objectives. This congruence definition has had an enormous impact on education. In the first place, the definition appeared in connection with an organized rationale about the entire instructional process, and provided a means whereby the teacher, the administrator, the supervisor and the curriculum maker could make sensible judgments about what they were doing.

What disadvantages accrue as a result of this definition of evaluation? First, with the heavy emphasis that this approach placed on objectives, the major task of the evaluator came to be seen as developing a set of objectives that were sufficiently operational that the required congruence assessment could occur. A second disadvantage of this approach was an insistence that the objectives were to be stated in behavioral terms. Of course, not everything we do in education can be related to increased achievement in students. A third and perhaps major disadvantage of this approach is that the emphasis on student behavior as the criterion caused evaluation to become a *post facto* or terminal technique.

One other kind of evaluation can be seen in the traditional school survey, commonly carried out by a panel from a department of education. Advantages of this approach are fairly obvious. First, the evaluation is quickly managed. Second, the evaluators are typically experts with a great deal of experience which they can bring into play without being artificially constrained by "instruments." And, there is no appreciable lag between data collection and judgment; we do not need to wait for long time periods while data are being processed.

Despite these apparent advantages, there are very few people at the school level who felt satisfied with the outcome of such an evaluation. Who among us has not experienced that empty let-down feeling after a panel inspection. We have misgivings because the appraisal is often cursory—it skirts over the surface of the operation of the school; it may highlight aspects which the staff members feel are of minor importance, and neglects areas which are of direct concern to the practitioners. The so-called panel inspection may be just another administratively expedient approach, without many worthwhile pay-offs.

## EVALUATION: NEW DIRECTIONS AND PERSPECTIVES

You have no doubt come across a variety of definitions of evaluation. I am going to dodge the semantic question and put before you a chain of reasoning which will indicate how evaluation has come to be viewed recently:

1. The quality of programs depends upon the quality of decisions in and about the programs;

2. The quality of decisions depends upon decision-makers' abilities to identify the alternatives which comprise decision situations and to make sound judgments of these alternatives;

3. To make sound judgments, decision-makers require timely access to valid and reliable information pertaining to the alternatives;

4. The availability of such information requires systematic means to provide it; and,

5. The processes necessary for providing this information for decision-making collectively comprise the concept of evaluation. (Stufflebeam, 1969, p. 6)

Now, what does such a view of evaluation imply?

In the first place it implies that evaluation is an all-encompassing notion, it implies a systems approach, it embraces the whole sphere of operations in the school. As a global affair, evaluation is not confined to assessing student abilities. The objectives of a course of instruction, the grouping of students, the deployment of staff are examples of other matters which ought properly be subject to evaluation. In essence, when evaluation is viewed as an information-gathering device, we become interested in as many kinds and styles of evaluation as may be of use in moving the educational enterprise towards our stated goals.

Bloom (1968, pp. 2-3), for example, considers that it is useful to distinguish among three inds of evaluation when we go about the measurement of human traits. The first approach, which can be traced back to the work of Galton and Binet, is an attempt to measure characteristics which are "in the individual". That is, the individual is the possessor of I.Q., various specific abilities, creativity, etc., and he is to be measured to determine the amount of each characteristic he possesses. The second approach followed from the work of Tyler (1934), who proposed that educational testing be concerned with the changes in students produced by educational means. In appraising change, evaluation has to take place at two or more points to gauge the direction and extent of change. Since some limitations have to be placed on the kinds of change which should be the focus of evaluation, one obvious way to proceed is to construct tests which would sample changes in student behavior specified by the objectives of instruction. The third approach suggested by Bloom (1968, pp. 9-12) is to assess the characteristics of individuals in relation to a particular environment, task or criterion situation. In Bloom's words:

> Assessment characteristically begins with an analysis of the criterion and the environment in which the individual lives, learns and works. It attempts to determine the psychological pressures the environment creates, the roles expected, and the demands and pressures —their hierarchical arrangement, consis-

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> tency, as well as conflict. It then proceeds to the determination of the kinds of evidence that are appropriate about the individuals who are to be placed in this environment, their needs and personality characteristics, their skills and abilities. (1969, p. 10)

Other typologies have been suggested which may also provide guidelines for the beginning evaluator. Stake (1967, p. 528) suggests a distinction between antecedent, transaction and outcome data:

> An antecedent is any condition existing prior to teaching and learning which may relate to outcomes. . . . Transactions are the countless encounters of students with teacher, student with student, author with reader, parent with counsellor—the succession of engagements which comprise the process of education. . . . Traditionally, most attention in formal evaluation has been given to outcomes—outcomes such as the abilities, achievements, attitudes, and aspirations of students, resulting from an educational experience.

A similar format has been put forward by Stufflebeam (1969, pp. 6-8) who specified the following four strategies for evaluating educational programs.

1. *Context evaluation.* The purpose here is to define the environment where change is to occur, the environment's unmet needs, problems underlying those needs, and opportunities for change. For example, the environment may be defined as the inner city elementary schools of a large metropolitan area. Study of such a setting might reveal the actual reading achievement levels of children in this area are far below what the school system expects for them. This would be the identification of a need, i.e., the context evaluation would have revealed that the children's reading achievement levels need to be raised. As a next step in the context evaluation, the evaluator would attempt to identify the reasons for such a need. He would raise a number of pertinent questions. Are the students receiving adequate instruction? Is there a major language barrier? Is there a high incidence of absenteeism? Are the school's expectations for these students reasonable? These are what is meant by problems. They are potential dilemmas which prevent the achievement of desired goals and thereby result in the existence of needs.

Information from context evaluation leads ultimately to the establishment of program goals and objectives.

2. *Input evaluation.* To determine how to utilize resources to meet the program goals and objectives, it is necessary to evaluate the input. Essentially, input evaluation provides information for deciding whether outside assistance should be sought for meeting goals and objectives—what strategy should be employed, for example, the adoption of available solutions or the development of new ones, and what design or procedural plan should be employed for implementing the selected strategy.

3. *Process evaluation.* Once a designed course of action has been approved and implementation of the design has begun, process evaluation is needed to provide periodic feedback. The objective of process evaluation is to detect or predict, during the implementation stages, defects in the procedural design as it develops. The overall strategy is to identify and monitor, on a continuous basis, the potential sources of failure in a project. Of all the forms of evaluation, process evaluation is probably the one we have neglected most.

4. *Product evaluation.* In product evaluation (Scriven, 1967, p. 41), the objective is to relate outcomes to objectives, and to context, input and process. In short, product evaluation measures and interprets outcomes. Each of the above views present then, new views but more importantly, new applications for evaluation.

A second characteristic of the new view of evaluation, which should be clear from the above discussion, is the reassertion that evaluation is a means to an end and not an end in itself. That sounds like a truism, but it nevertheless needs to be said for we do not always treat evaluation as the servant it can be—too often it has been our master.

As a third characteristic, we should recognize that any process of evaluation ought to take account of the following things:

the *target*—what it is that is to be measured;
the *purpose*—the reasons for carrying out the measurement;
the *setting*—the boundaries within which the measurement is to be attempted;
the *method*—the strategies or devices to be used in carrying out the measurement;
the *finding*—the outputs or indices which are compiled.

The after-the-evaluation period is obviously concerned with decisions of one kind or another—about the target, the purpose, the outcomes and so on. The whole process is cyclical, in fact, and of course a systems approach would imply this.

At the same time, we should not overlook a fourth characteristic, that we have to be concerned about the adequacy of evaluations. Several criteria for making this assessment are worth considering:

*validity*—is the information what the decision-maker needs?

*reliability*—is the information reproducible?

*timeliness*—is the information available when the decision-maker needs it?

*persuasiveness*—does the information reach all the decision-makers who need it?

*credibility*—is the information trusted by the decision-maker and those he must serve?

Since we have said that the purpose of evaluation is to provide information for decision-making, a classification of educational decision situations may be helpful. This classification indicates the broad areas within which we must, perforce, operate:

*planning decisions*—those which focus on needed improvements by specifying the domain, major goals and specific objectives to be served;

*programming decisions*—specify procedure, personnel, facilities, budget and time requirements for implementing planned activities;

*implementing decisions*—those which are made in the course of directing programmed activities;

*recycling decisions* — those concerned with the termination, continuance, evolution or modification of activities.

## CONCLUSION

At the beginning of this paper, I suggested that an attempt would be made to relate what I have said about evaluation to current demands on the principalship.

First, some comment about the task of the principal. If you reflect on the roles set out for the principal by Downey and others you will surely agree that evaluation is the underpinning theme in each sphere of his operations. Evaluation as a tool of the administrator does not run counter, or add another burden, to his office. The function of evaluation is supportive and in fact makes possible the proper fulfilment of the principal's major obligations. Bear in mind, too, that many of the kinds of evaluation alluded to would be carried out by members of staff, either individually or working in teams. In fact, on some occasions, the principal may feel it important to have an outside evaluator assist in furnishing information for some crucial decisions. The advent of new purposes and directions for evaluation should indeed be welcomed by the principal.

The second category of demands on the principalship, referred to earlier, concerned the host of pressures on education in general. We get reminded often enough about the challenges facing education, and these reminders emanate from many quarters. Some criticism is informed and well-meaning, other criticism is sarcastic and destructive. Unfortunately many of the issues thrust before us are unaccompanied by meaningful solutions. One of the reasons for this, I would venture, is that we in education are charged with overcoming societal ills in addition to dealing with our own school-related problems. Some would deprecate the distinction I have made by declaring that society's problems are the school's problems. As I implied earlier, other agencies are equally if not more responsible for the present milieu.

Where does this leave the school? If we continue to listen and respond to those who pontificate about such generalized objectives as "to promote good citizenship", we shall carry on much as before—not sure of where we are going, and never knowing whether we have arrived. But if we become more concerned about what I would call first-found objectives, which have to do with the imparting of certain knowledge and skills, and if our teaching is carried on in an intellectually honest fashion, in an atmosphere which children find interesting, challenging and enjoyable, then the second-round objectives of attitudes and values, like the citizenship aim, could be accompanying payoffs.

Evaluation has a distinct and meaningful role with regard to first-round objectives, in shaping and implementing curriculum, in appraising learning situations, and in assessing student performance. The challenge is there; it is tangible, attainable, and well worthy of pursuit.

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# THE PRINCIPAL AND CURRICULUM EVALUATION

**NAOMI HERSOM**

## INTRODUCTION

> Then the king commanded Ashpenaz, his chief eunuch, to bring . . . youths without blemish, handsome, and skilful in all wisdom, and competent to serve in all the king's palace, and to teach them the letters and language of the Chaldeans . . . They were to be educated for three years, and at the end of the time . . . the king spoke with them . . . and in every matter of wisdom and understanding concerning which the king inquired of them, he found them ten times better than all the magicians and enchanters that were in all his kingdom. (The Book of Daniel)

> Adequate evaluation of school programs is recognized as an essential part of the educational activity. Most federal programs require annual evaluation; governmental agencies are asking for evidence of the success of school programs as justification for requests for increased appropriations; laymen, faced with ever higher taxes, are raising similar questions. (Association for Supervision and Curriculum Development, *News Exchange,* February 1970)

Consciously or unconsciously, deliberately or casually, by king's command or by government regulation, curriculum evaluation in one form or another has been carried on through the centuries. *What knowledge is of most worth?* has been asked and answered in many different ways down through the years as ideas about the purposes of education have changed and as old ways of teaching and training the young have been found wanting in the light of a society's new demands. Currently, the term *curriculum evaluation* is being employed to describe a wide spectrum of activities all designed to evaluate public education in its various manifestations. As with many other terms, greater usage has led away from preciseness and specificity to much broader applications and in the case of *curriculum evaluation* there now seems to be no one meaning for the term regularly accepted by a large number of speakers and writers. It is obvious that if ideas about *curriculum* and *evaluation* are to be communicated clearly, then there must be some agreement about the definitions of these terms.

In Canada, not so many years ago, when the word *curriculum* was used, it almost invariably referred to those courses of study which were prescribed by Departments of Education. Indeed, today it is still customary to refer to *curriculum* guides which contain concepts and ideas to be taught, references to source materials, and suggested courses of study in various subject areas. Revisions are frequently being introduced in attempts to meet the changing needs and interests of the pupils of all ages and abilities for whom the schools have been instituted. As well, the curriculum, in this sense of the word, has been viewed as the vehicle whereby the school may achieve those purposes relegated to it by society. Since this meaning of curriculum still persists, the problem of arriving at a clear definition is compounded.

The view that curriculum consists of 'what is to be learned' has been retained by Gagné (1967), for example, for purposes of research. He has found it useful to conceive of curriculum as

> . . . a sequence of content units arranged in such a way that the learning of each unit may be accomplished by a single act, provided the capabilities described by specified prior units (in the sequence) have already been mastered by the learner (p. 23).

However, others have expanded the meaning of curriculum to encompass a whole range of activities including diagnosis of needs, formulation of objectives, selection and organization of content, selection and organization of learning experiences, and the determination of ways and means of judging the effectiveness of what is taught (Taba, 1962). Broadly defined, curriculum refers to all of the experiences planned for pupils by the school and executed by the teachers on behalf of learners (Frost and Rowland, 1969). It is this dynamic, developmental concept of the meaning of curriculum which has contributed to an increasing dissatisfaction with the syllabuses of prescribed courses of the past. For although curriculum still refers to *what* is to be learned, all of the activities leading to the selection and choice of that content, and all of those activities which are designed to facilitate the learning of that content are identified as elements of curriculum as well. Such a concept of curriculum makes evaluation one of the components of the total ongoing processes as opposed to a final grading or judging of products. At each stage in the development of curriculum, decisions must be made, and these decisions are based ultimately on judgments as to what is best. Stufflebeam (1969) describes evaluation as "enlightenment for decision making" and points out some important distinguishing features which should characterize curriculum evaluation:

(1) evaluation of this nature should facilitate the continual improvement of the curriculum program;

(2) evaluation should be a device for making decisions during the planning and implementation of the program;

(3) evaluation must be feasible under ordinary school and classroom conditions; and

(4) it should be possible to apply the findings to a wide range of school situations. Thus, curriculum evaluation is not to be thought of merely as an external activity leading to authorization or rejection based on the final outcomes of a curriculum program, but rather as an integral part of curriculum development.

Curriculum evaluation, then, is of immediate concern for principals who are involved both directly and indirectly in making decisions which affect a school's curriculum. Along with teachers and other professional colleagues in the school system, they are confronted continually by evaluation questions which vary very considerably in nature. Each of the types of evaluation questions suggests a different purpose and kind of evaluation activity. It follows that the principal who is involved in curriculum evaluation should: (1) be able to identify the kinds of questions that must be considered when a curriculum program is being developed as well as the nature of the evaluation questions suitable at each stage of the development process and the appropriate units for a particular type of evaluation; (2) be knowledgeable about some of the special problems of evaluation; and (3) be aware of the role of the principal in the total curriculum development process. Let us examine each of these aspects of a principal's task in turn.

## SOME CURRICULUM CONSIDERATIONS

It is rather artificial to attempt to treat curriculum questions independently of evaluation questions when it is assumed that both types of questions are bound up together throughout the entire curriculum development process. However, for purposes of analyzing the two sets of questions, these will be identified and considered separately at first. In the discussion that follows, curriculum refers to all of the ongoing activities related to the choice of goals and objectives for the school, the means selected and implemented to achieve these aims, and the ways in which information is gathered and used to improve the selection and implementation activities. This concept of curriculum is not static; it is a dynamic process of development, continually being recycled in order to bring about improvement.

When goals for a curriculum program are being selected, curriculum developers ideally turn to a number of sources—philosophers, politicians, economists, representatives of the disciplines, members of the teaching profession and of the public at large—in order to set overall goals that are consonant with societal aims, and with current knowledge about subject matter, learners' abilities and needs. When a particular curriculum program is being developed, the question is not solely *What are the aims to be achieved?* but, perhaps of even more importance, *Which of these goals should be of primary concern and which are appropriate to that particular part of schooling for which the curriculum plan is being prepared?* In the field of curriculum development these sorts of questions are very often dealt with by representative committees established by provincial departments of education. At the provincial curriculum committee level, specific objectives may also be selected and communicated to the schools of the province, or it may be the option of each school and teacher to formulate particular objectives. In either case, the principal and his staff must ask the curriculum question: *Which of these objectives will lead to the successful accomplishment of the goals of the curriculum for our students?*

Similarly, although provincial curriculum committees may suggest topics, instructional strategies, methods of organizing the content, the pupils, and learning experiences, it is the teacher's day by day selection from among the many possible means of achieving the objectives set by the school, and within the constraints set by the resources of the school, that constitutes the most crucial of all curriculum decisions. When the teacher answers the question:

*What content, presented in what order, using which instructional strategy with which pupils, for how long?* then this becomes the *de facto* curriculum program for that teacher's students. The curriculum questions related to content, scope and sequence, learning and instruction, organization of time and materials, are vital ones which must be directed by school staffs towards the programs they are offering their students.

One other curriculum question is continually being raised: *What are the results of our curriculum program?* Here again, school principals and staffs are very much involved. It is they who can make first hand observations of the products of the teaching-learning situation they are providing. They are in a position to note reactions of pupils and parents to the program. And they should be prepared to identify the unanticipated outcomes as well as the expected ones. There is very real danger, however, that this end result type of question may be the only one given serious attention while the necessary prior questions are ignored.

## SOME EVALUATION QUESTIONS

It is obvious that at each stage during the development of a curriculum program consideration needs to be given to the quality of choices being made. When goals and objectives are selected, when some topics and learning experiences and teaching methods are chosen while others are rejected, value judgments are inevitably influencing those decisions. This requires conscious, deliberate analysis if the quality of the curriculum activities is of concern. To assist in such analysis, certain types of evaluation questions may be asked.

Perhaps the most difficult evaluation question of all is the one that asks *Is the goal itself worthwhile?* Such a question implies that, within a certain frame of reference, some things are of greater worth than others. Moreover, some things are of greater worth for different individuals at different times and under different circumstances. Tempting as it might be to point out that such stipulations make it almost impossible to arrive at a single set of satisfactory answers, to avoid confronting this problem would only lead to even greater difficulties. Upon such value judgments the whole direction and course of the school hinge, and the quest continues. Centuries ago, the problem was described in this way:

> That education should be regulated by law and should be an affair of state is not to be denied, but what should be the character of this public education, and how young persons should be educated, are questions which remain to be considered. For mankind are by no means agreed about the things to be taught, whether we look to virtue or the best life.
>
> Neither is it clear whether education is more concerned with intellectual or with moral virtue. The existing practice is perplexing; no one knows on what principle we should proceed—should the useful in life, or should virtue, or should the higher knowledge, be the aim of our training; all three opinions have been entertained. Again, about the means there is no agreement; for different persons, starting with different ideas about the nature of virtue, naturally disagree about the practice of it. (Aristotle).

Two more evaluation questions arise once the priorities have been ordered. One might be labelled the effectiveness question and the other, the efficiency question. In other words, having established the worthwhileness of the goal, it then becomes essential to ask, *Is the goal being achieved?* and *How well are we achieving it?* Each of these questions entails a different kind of search: the former is oriented towards the *quality* of outcomes in relation to the goal, while the latter is oriented towards *quantity* in terms of rate and amount of progress towards the goal.

Another evaluation question follows logically. *How can the means of achieving the goal be improved?* The search for ways of improving present practice may then lead to the further question: *What other means are there to achieve the goal?* Perhaps, in some respects, this is the most creative type of question to pose, for it should serve not only to stimulate research and innovation, and may result eventually not only in curriculum change and improvement but also in a reassessment and change of goals.

A different kind of evaluation question is the comparative one. *Is this means of achieving the goal as good as, better than, or worse than some other means?* Comparisons of this type have been most common, but have often been unfruitful because the question has not been applied specifically to teaching-learning situations of many different kinds. To rephrase the question for evaluation purposes, it is important to ask: *Is this means of achieving the goal better* *than some other means for a particular type of learner, or a particular type of teacher, in a particular type of school environment?*

Yet another evaluation question seems to deserve consideration before going on to discuss the ways in which these questions can be applied to various kinds of curriculum activities. This is the question: *Who should evaluate?* Opinions vary, ranging from those who hold that someone outside of the activity should be responsible for evaluation, to those who insist upon participant evaluation in an effort to ensure that immediate feedback will facilitate the process of change leading to improvement. It seems likely that this question can best be answered in the light of which of the other evaluation questions is being employed. It may well be appropriate to use a non-participant evaluation if the overall effectiveness of a program is being investigated, but more appropriate to involve the participants as evaluators when the efficiency of a program is being questioned. Freeing someone on the school staff to accept the responsibility for evaluating part of the ongoing activity of the school seems to offer several advantages. By formalizing the curriculum evaluation role, a more consistent approach to the task of evaluation could conceivably become the prelude to improved learning and teaching in the school.

The several types of evaluation questions identified here, have been, and are being raised about all aspects of curriculum as it is defined in the broadest sense. If the sequence of curriculum activities is viewed as one which leads from the setting of goals, through the selection of content and experiences, the means of organizing the content and experiences and the measurement of outcomes, then evaluation at each stage can become a renewal mechanism which offsets atrophy and prevents a change-by-crisis syndrome from developing. (See Figure 1).

## SOME FOCUSES FOR CURRICULUM EVALUATION

Each of the curriculum and evaluation questions can, and, I would contend, ought to be directed towards all aspects of the school situation in which teachers and administrators find themselves. From a practical standpoint, those questions which are immediately related to the kinds of decisions the administrator or teacher is being asked to make should receive first attention. If the proposition holds true that those persons closest to the point of implementation are best able to make the decisions which affect them, then it may be argued that the same persons should be asking the evaluation questions which precede the decision-making. The diagnosis of the type of decision-making involved then becomes a necessary and important prerequisite if the evaluation is to be effective.

By identifying the stage in the curriculum development process to be evaluated, the appropriate evaluation questions may be applied in meaningful sequence. If, for example, there is felt dissatisfaction with the content of courses, the organization of the school or the ways in which teacher time is being allocated, then the kinds of questions which are suitable for evaluating the *means* being used to achieve curriculum objectives should be asked first. Working within the curriculum development cycle just described, it is reasonable to suppose that once any one of the questions has been raised, other considerations will necessarily follow.

Again, from the practical standpoint, administrators and teachers must map out some boundaries for their evaluation activities in order to keep them manageable. If this is not done, their efforts are in danger of becoming so diffused that the evaluation will lose its significance in the enlightenment-for-decision-making role which has been ascribed to it.

Evaluation activities in schools might originate with an examination of the contents of the various curriculum guides supplied by the provincial authorities. The principal and staff may wish to set up procedures which will enable parents and students to have a part in weighing those objectives and choosing those which will be adopted for their particular school. Another set of evaluation questions might centre around observations of the ways in which the school is providing for differences among pupils' learning and thinking styles, and among pupils' affective needs. Still another type of evaluation might be focused on the instructional strategies or on the instructional materials being used by teachers. In some instances, the school organization might become the focus for evaluation. Whatever the starting place, the whole set of evaluation questions which have been proposed may eventually be applied appropriately within the boundaries set for a particular evaluation undertaking.

The unit of evaluation may be as all-embracing as the total curriculum program of a school, or as narrow as the choice of content for the teaching of one unit. It may

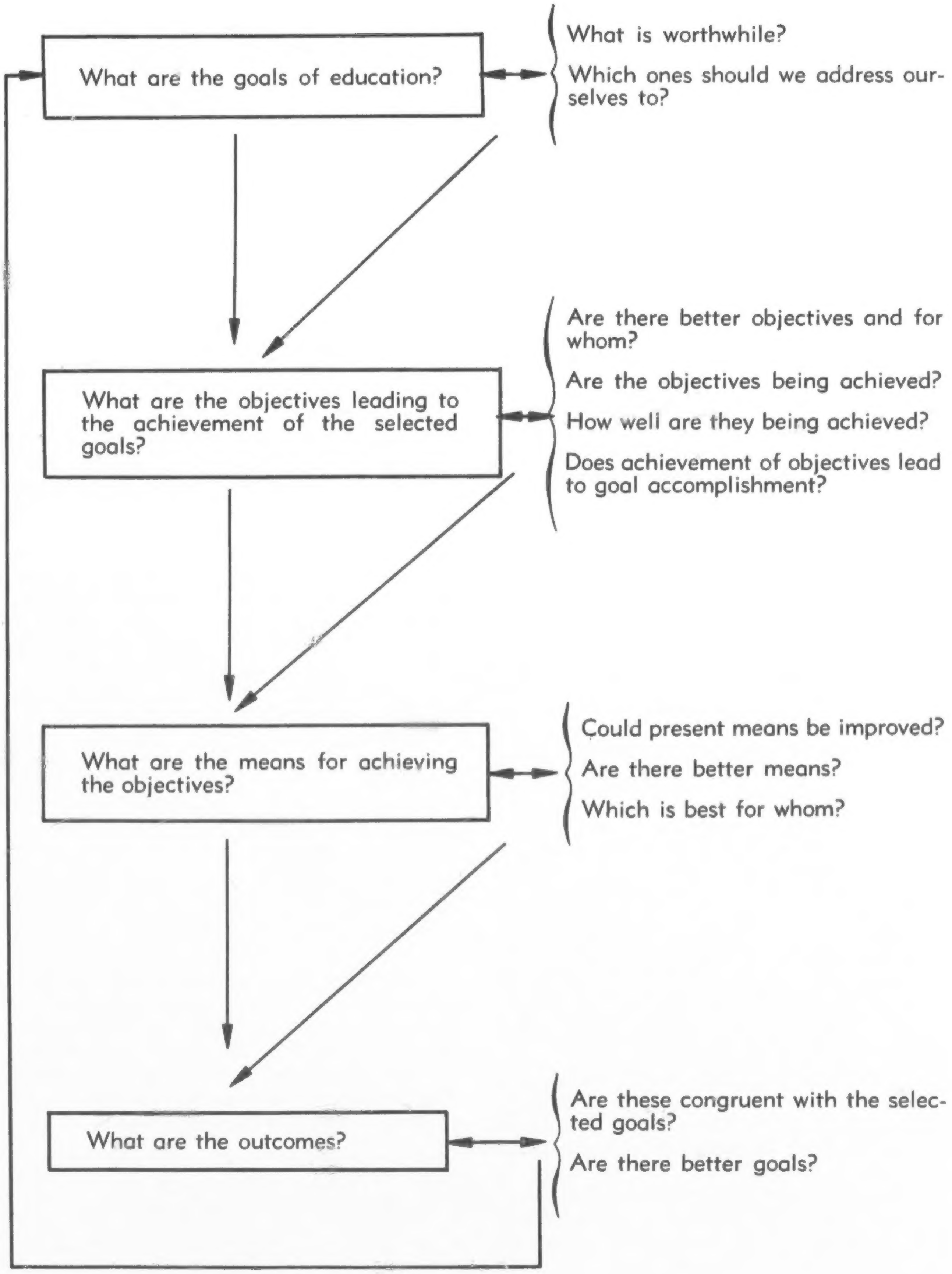
What are the goals of education?
What is worthwhile?
Which ones should we address ourselves to?
What are the objectives leading to the achievement of the selected goals?
Are there better objectives and for whom?
Are the objectives being achieved?
How well are they being achieved?
Does achievement of objectives lead to goal accomplishment?
What are the means for achieving the objectives?
Could present means be improved?
Are there better means?
Which is best for whom?
What are the outcomes?
Are these congruent with the selected goals?
Are there better goals?

Fig. 1. THE EVALUATION COMPONENT IN THE CURRICULUM DEVELOPMENT CYCLE.

focus on the people directly involved in the teaching and learning activities within the school, the encounters between teachers and pupils and the kind of climate for learning which the school provides. Curriculum evaluation is far more than measurement of pupil achievement by grade scores. It is the careful and thoughtful collection of evidence about each of the activities making up the process of curriculum development and the weighing of this evidence in the light of the standards or goals which have been set. It is inevitable that personal values will influence such judgments. The evaluator who is conscious of this fact will himself become a unit for evaluation when he questions his own assumptions and biases.

Charles Silberman (1970) recently described the situation this way:

> . . . by and large, teachers, principals, and superintendents are decent, intelligent, and caring people who try to do their best, by their lights. If they make a botch of it, and an uncomfortably large number do, it is because it simply never occurs to more than a handful to ask *why* they are doing what they are doing — to think seriously or deeply about the purposes or consequences of education. This mindlessness—the failure or refusal to think seriously about educational purpose, the reluctance to question established practice — is not the monopoly of the public school; it is diffused remarkably evenly throughout the entire educational system, and indeed the entire society.
>
> The solution must lie in infusing the various educating institutions with purpose; more important, with thought about purpose, and about the ways in which techniques, content, and organization fulfill or alter purpose. And given the tendency of institutions to confuse day-to-day routine with purpose, to transform the means into the end itself, the infusion cannot be a one-shot affair (p. 83).

Silberman's plea to educators to overcome "mindlessness" is in one sense a description of what curriculum evaluation is all about—to think about purpose, to question established practice, to analyze ways in which techniques, materials, and methods affect purpose—all leading to actions which are consistent with worthwhile purposes. Westbury (1970) calls this ". . . the issue of intention, the context that defines what curriculum evaluation should be about and for (p. 257)."

## A SAMPLE SET OF EVALUATION QUESTIONS

To be even more specific, what kinds of questions might be asked in order to evaluate an instructional program, for example. Michaelis *et al.* (1967) have proposed a framework consisting of several sets of elements, each providing criteria for the evaluation of a discipline-oriented curriculum. Based on the assumption that the curriculum of the school is composed of the study of several fairly discrete subject fields, their categories of evaluation questions serve as a guide for selecting evaluative criteria. The eight categories are: Foundations; Structure; Inquiry; Complete program; Teaching strategies; Pupil evaluation; Program evaluation; and Teacher education. Within each category, evaluation questions may be suited specifically to a particular program in a subject field. In the Foundations category, for instance, the discipline is to be the source of standards for content selection as well as for instructional procedures, and the findings of psychology will guide in determining the suitability of instruction and the sequence of learnings according to the developmental characteristics of the learners. Applying this to a social science program in particular, the appropriate evaluation questions in this category might be:

> Are history and the social sciences used as primary sources of content and processes of inquiry?
>
> Is direct attention given to human problems and societal conditions?
>
> Is knowledge of child development and learning used to facilitate instruction? (p. 270).

Each of these questions in turn could lead the evaluator on to even more specific questions related to particular topics or units.

One, of course, could challenge the presupposition which Michaelis and his colleagues hold regarding the discipline-centred approach to the school curriculum. But that would be an evaluation of another type and would involve a different set of categories of evaluative criteria.

## SOME DILEMMAS IN CURRICULUM EVALUATION

A number of technical and philosophical problems in curriculum evaluation remain largely unresolved at present. Although it may be possible to postulate the appropriate kind of evaluation one needs to undertake, valid and reliable instruments or techniques may not exist to carry it out, or if they do exist, it may be beyond the resources of the school to apply them. Moreover, the issues revolving around the establishment of criteria and standards of pupil performance call into question the validity of some of the measures used and the use which is made of them.

One of the current trends, for example, has been towards an emphasis on the statement of curriculum objectives in terms of observable behavior on the part of the learners. A great deal has been written in favor of behavioral objectives to extol the very real advantages such statements have for use as empirical measures. It is satisfying, perhaps, to be able to arrive at a clear-cut conclusion—the learner has or has not given evidence of the required behavior at an acceptable level of mastery. It is also undoubtedly a salutary exercise for those developing curricula to discipline themselves sufficiently in order to specify the kinds of behavior needed to achieve the goals. But herein lies one of the dilemmas. Objectives stated in behavioral terms demand immediate or almost immediate evidence of attainment. Whether the long-range goals for education are being met or not still poses a serious evaluation problem. We may posit that certain behaviors will result ultimately in achieving the ends we desire for our students, but our record for accurate prediction to date is not an illustrious one.

Another trend is the increasing demand for accountability. No doubt this also may have some salutary effect on the improvement of curriculum by putting the onus of responsibility on the educators instead of adopting a take-it-or-leave-it stance whereby the onus of responsibility is placed on the student. But again, the danger that procedures may be used primarily because they are indicators of some form of easily measureable behavior may militate against the true aims of the curriculum. Some of the student protests against grades which are meaningless except as a screening device are symptomatic of this particular dilemma.

As the goals of the curriculum in North American schools have undergone rapid and major changes in the past two decades, an increased emphasis on the worth of the individual and upon the goal of giving each pupil the best education possible for him has become apparent. The resulting efforts to provide for all types of exceptional children, to offer a greater variety of school experiences in order to cater to differing student talents, to individualize instruction by respecting differences in rates of learning, are ample evidence of this. The dilemma here is that having tried these things, they have all been found wanting to some extent. It has been encouraging to note that psychologists are making more and more progress towards assisting curriculum developers in this area. Findings of studies of the differing cognitive styles among learners and teachers have implications which may lead to important innovations in methods of achieving our curricular goals (Messick, 1969). In addition, more attention is being paid to the affective domain of learning, and measures of affective behavior are becoming available in order to provide some of the essential tools for evaluation (Beatty, 1969). When the evaluation question is asked, *What is the best learning eperience for this child?* we may soon be able to answer with more certainty than has been possible up to now.

One of the most persistent dilemmas in curriculum development revolves around the question: *Who shall decide?* When there exists a plurality of values held by the community at large, the parents, the students and the professional staff, and when even within each of these groups there exists little consensus on values, the political processes used in the past to cope with diversity do not suffice now. The challenge here to principals and teachers to devise new ways, and to search for alternative ways of meeting the demands placed on the school by its many publics can be ignored only at some risk.

## SOME IMPLICATIONS FOR PRINCIPAL BEHAVIOUR

Having suggested a few of the essential aspects of evaluation as a component of the curriculum development process, it is appropriate to conclude with a consideration of the role of the school principal in curriculum evaluation.

One of the technical-educational skills of the effective school administrator identified by Downey (1965), is that of competence in the areas of program development and curriculum problems. Although it is difficult to isolate curriculum development from the other skill areas he discusses (technical-managerial, human-managerial, and speculative-creative) within the scope of the technical-educational category, it is apparent that an effective principal will possess a knowledge and awareness of the whole curriculum development process and of the part evaluation plays as an important component in that process. I would suggest that one of the best ways for the principal to increase his skill in this area, is to have a very clear conception of the integral part evaluation plays at each stage of curriculum development and an appreciation of the interdependence of all activities within the curriculum improvement cycle. By deliberately and consciously building in ways to ask the kinds of evaluation questions appropriate to the curricular activity, the school's curriculum development program will be made vital. Under these conditions curriculum evaluation will not be viewed as though it were some sort of imposed, external examination to be dreaded and, preferably, to be avoided, but it will be accepted as a normal, expected part of each kind of curriculum activity.

The principal of a school has another important overall contribution to make by bringing to curriculum decision-making a steadiness based on his knowledge of pupils and of what makes the best contribution to children's growth and development (Torgenrud, 1970). He is in a position where he may be able to protect the best interests of students by insisting that evaluation questions be asked in human terms, for example, and not solely in economic terms. At times, too, he may have to insist that the best interests of children be placed ahead of the interests of scholars in a discipline or employers in an industry, or even administrative convenience and efficiency.

Some of the more specific aspects of the principal's role have to do with a number of the evaluation activities which have been described earlier. The principal, for example, is probably in the best position in the school to identify the pressure points —places where curriculum difficulties have arisen. These can be analyzed in evaluation terms and the appropriate questions raised in order to initiate changes necessary for improvement. The principal can adopt a policy of openness towards new ideas, of willingness to consider unorthodox suggestions and proposals for change, and of fostering visions of curriculum improvement for the future. Schools in this province are being granted funds for innovative projects. With the principal's support and active interest in curriculum innovation, staff members can be encouraged to ask themselves the key evaluation question—is there a better way that we can devise, or a better way to adapt the present curriculum program we offer to our students?

Principals, too, can provide the necessary leadership to facilitate a study of the suggested objectives and recommendations contained in the curriculum guides published by the Department of Education. In this way staff members will better be able to make a selection of those suggestions which are particularly appropriate to the purposes of the school. Alternatively, the principal and staff might choose to think through their own sets of objectives. But in either case the principal has a leadership role to play in the goal selection part of the curriculum development process.

As a co-ordinator and facilitator, the principal has an interpretive task to do with the various publics interested in the school. Students, parents, teachers, school officials, and the community-at-large want to be kept informed about the school's acivities, who is involved in them, and what it is hoped to accomplish by means of them. The principal can also articulate the many parts of a curriculum development program. He is in a position to make the necessary arrangements for providing the resources needed for curriculum improvement — personnel, time, space,and materials. Once it becomes possible for staff members to undertake a curriculum development program, then the principal is well advised not to become a barrier hindering teachers from making those curriculum decisions which it is necessary and important for them to make.

The principal's attitude towards curriculum improvement is inevitably a vital factor in the development of a school's program. In the province of Alberta the Department of Education has recognized the importance of the principal's role, and a number of avenues now exist which the principal may choose to use in order to obtain assistance in curriculum development if he requests it: he can establish liaison with curriculum consultants and use them as resource persons; he can make use of technological aids provided in the form of television programs and tapes; and he can call upon the services of a specially appointed school facilitator whose task it will be to help schools in the province bring about changes in curriculum successfully.

## CONCLUSION

The principal's role in curriculum evaluation may well be one of the most significant features of his position as the key agent

2

in bringing about improvement in public school education. The findings of the "Study of Educational Change and School Improvement" (Bentzen, 1969) identify the individual school as the basic unit for effecting change, and the effective principal as one who has developed the skills which lead to success in decision making, problem solving, resource acquisition and conflict management activities. Each of these activities is relevant to the curriculum improvement process. When educational values are applied to the planned activities of the school, and when any of the activities is found wanting in the light of those values, the way is then effectively prepared for the introduction of changes designed to lead to curriculum improvement.

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# GOAL ORIENTED EVALUATION

**THOMAS O. MAGUIRE**

*The following test was administered to members of the 1970 Leadership Course for School Principals as an introduction to the subsequent address:*

## GENERAL UNIVERSAL EXAM FOR SELECTING STUDENTS (GUESS)

*Grade V Social Studies*

(Circle the letter corresponding to the correct answer in each question*)

1. The most outstanding characteristic of the climate of Alberta is the
   a. chinook wind
   *b. amount of sunshine it receives each year
   c. amount of snow that falls each winter
   d. severe winter
2. Less people are farmers in Alberta today than were twenty years ago because
   a. the cities are becoming larger
   *b. farms are becoming larger
   c. people do not like farming
   d. farms are becoming smaller
3. Petroleum is another name for
   a. natural gas
   *b. crude oil
   c. gasoline
   d. oil and natural gas
4. Why did the plains Indians not use canoes and live in teepees?
   a. They did not have enough buffalo hides to use for teepees.
   *b. Because they did not travel from place to place, they could have permanent homes.
   c. There was not enough birch-bark to use for canoes.
   d. They were too far from the lakes and rivers.
5. One thing that the White man gave the Indians which seemed to cause trouble was:
   a. the wheel
   b. the horse
   c. disease
   *d. whisky
6. If an Indian meets a mountie today, he probably
   *a. speaks respectfully to the mountie
   b. speaks rudely to the mountie
   c. starts a fight with the mountie
   d. hides from the mountie in fright
7. In a fort the most interesting house was
   a. the cook house
   b. the blacksmith's shop
   *c. the trading post
   d. the manager's home
8. Men transported furs to the main trading post in one of the following
   *a. York boats
   b. Birch bark canoes
   c. Rafts
   d. Paddle wheel steamers
9. The life of the settlers seemed to be
   a. easy and happy
   b. easy and unhappy
   *c. hard and happy
   d. hard and unhappy
10. From the Indians the White man learned
    a. How to live off the land.
    b. How to cure certain illnesses.
    c. How to play lacrosse.
    *d. All of the above

*Grade VI Geography*

11. Air transportation is very important. It is used for
    *a. very light goods of very much value
    b. very light goods of very little value
    c. very heavy goods of much value
    d. very heavy goods of little value

*Gradve VI Social Studies*

12. The most precious work from the Ancient Near East was
    a. Hammurabi's Code
    b. The Great Pyramid
    *c. The Old Testament
    d. The Hanging Gardens of Babylon
13. Man became civilized because he
    a. became tired of fighting wars
    *b. learned to control his surroundings
    c. learned to make friends with strange peoples
    d. learned to read and write
14. Fred runs a lemonade stand during the months of July and August. He charges

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*Asterisks designate correct answers according to prospective teachers who constructed the test items.

5¢ a glass and his materials such as ice cubes, lemonade mix stand and sign, cost him 3¢ a glass. He averages 20 glasses sold every day of the 62 days. Fred running his lemonade stand is an example of
*a. a producer
b. a consumer
c. an employee
d. an enterprise

15. (In the previous question) which of the following is not part of his capital equipment
a. his sign
b. the glasses
c. the jug
*d. none of the above

16. By the term 'society' we mean
a. mankind in general
*b. people having a common cultural background
c. a nation with one language
d. the upper class

17. Transportation and communication unify a country and this is especially true in Canada. Which of the following do you think is the most important method over long distances
*a. railways
b. roads
c. airlines
d. river transport

19. Which of the following alternatives is not a reason for the plains Indians losing their lands and being put on reserves
*a. the buffalo were their main economic asset
b. the traders introduced whisky
c. the settlers had better weapons
d. the missionaries brought Christianity

*Grade IV Science*

20. Which thing could be classified as non-living?
a. dinosaur
*b. train
c. sponges
d. dead people

*Grade VI Science*

21. Particles of electricity are called
a. molecules
b. protons
c. electrons
*d. protons and electrons

22. What instrument do scientists use to study distant objects?
a. spectroscope
*b. telescope
c. periscope
d. microscope

23. If Bob turned the globe around, he would show you
a. why the sun moves around the earth
b. why the stars change their position
*c. how the earth rotates on its axis
d. how the moon changes its shape

24. The needle of a record player moves around the centre in one direction. Which one of the following is this an example of?
a. the sun's movement
b. the constellation's movement
c. the earth's rotation
*d. the earth's revolution

25. If you were lost at night, how could you use the stars to help you find your way home?
a. follow the path of the milky way
*b. find the pointers of the big dipper
c. look at a shooting star to see which direction it falls
d. watch one star to see if it changes position

26. We often say that stars disappear during the day time and "come out" at night. Which sentence best explains what really happens?
a. we can see the Big Dipper in the Northern sky
*b. there are stars in the sky all the time
c. stars never shine during the day
d. there are stars in the sky only at night

27. Which of the following is the heaviest?
a. warm air
b. cool air
c. hot air
*d. cold air

28. To subtract 38 from 84 in your head, which of the following ways would be best?
*a. 84 - 30 then 54 - 8
b. 84 - 54then 50 - 8
c. 80 - 50 then 8 - 4
d. none of these ways are correct

## *GOAL ORIENTED EVALUATION*

### INTRODUCTION

You have now experienced an example of a poorly designed achievement test. The items were selected from some of the tests made by prospective teachers who were taking a test development course. Of course I selected items that tend to suit my purposes, and I would suggest that these items were the worst of a bad lot. This should not be taken as a condemnation of those students, as much as it should be taken as a symptom of the malaise that afflicts the measurement and evaluation business. The items that you have seen are ambiguous, incorrectly keyed or foolish, not because the writers are ambiguous, incorrectly keyed or foolish, but because they used techniques of test construction that are inappropriate to the classroom.

## CRITERIA FOR TEST CONSTRUCTION

Basically, we try to meet three criteria in test construction. Tests should be valid, they should be reliable, and they should discriminate. A valid test is a test that measures the construct that you are trying to measure. That is, people who possess more of the quality that you are trying to measure should get higher scores on the test than those who do not. A reliable test is a test that measures consistently. If you are measuring height, you don't want to find out that at one minute the individual is 6 feet tall and the next minute he is 5 feet tall. Such a measure would be unreliable. (And, by the way, would be invalid as well, since we know that a person's height does not change that rapidly.) A test that discriminates is one in which the scores of many people who take the test are spread out so that fine distinctions among people are possible. A ruler that measures in feet is not as discriminating an instrument as one that measures in inches.

Of the three facets of test development that I have listed, the most important is validity. The one on which the most time is spent in our test construction courses is discrimination. In order to have tests that discriminate, we must have items that discriminate, so we spend a good deal of time teaching our student-teachers to develop items that discriminate. Often the discrimination is purchased at the price of validity.

An item that discriminates is an item on which approximately 50% of the respondents get the correct answer. In order to achieve this goal, writers make a valiant effort to devise alternatives (or foils as they are called) that should be seductive. In theory, at least, the alternatives should be selected by students whose knowledge of the subject matter is inadequate. To devise items that are responded to correctly by 50% of the students and yet are unambiguous is a task that requires a considerable amount of skill, experience and time. In general, teachers neither have the time nor the expertise to carry out this task.

Furthermore the purposes for which teachers prepare tests do not call for the same kind of discrimination as that in tests that are used to select the top 60 applicants for medical school, or to predict which of a number of referrals to a psychiatric clinic will be psychotic within the year. Most of our testing is directed at one of two ends: evaluation of pupils, and evaluation of curricula. Seldom is our goal the selection of pupils. Until recently, a good deal of our testing had as an implicit goal the selection of pupils for advancement, or retention, but this is becoming less and less true. Philosophically, we believe in equal opportunities for all. We believe that if a person possesses the academic competence, he should be able to choose to go to university. If there is not enough room at the university, we do not put on a quota, we build a larger university. In short, over the past few years, in all of our school activities we have seen a change in educational philosophy from educating the best qualified, to educating all those who qualify. I think a manifestation of this was the death of the Grade 9 departmental exams, and the impending death of the Grade 12 exams.

In most achievement testing in schools the main purpose is not to select children. It is to determine whether or not the children have achieved an objective. Testing for this purpose should be quite different from testing for selection. For example—suppose we are measuring arithmetic achievement in grade three. We are quite sure that all of the students (or nearly all of them) know that $1+1=2$. Now this item does not discriminate very well among the students since almost all of them will give the correct answer, and our conventional test developers would advise us not to use it. But it might be extremely vital for the child's subsequent achievement that he know $1+1=2$, so we include it in our test just to make sure that every child has the concept. Such tests are called criterion referenced tests since the goodness or badness of a score is determined by the objectives. In contrast to criterion referenced tests are the norm referenced tests in which a score is evaluated in terms of how it stacks up with the scores made by other people in the test. The old Province of Alberta grade nine examinations were norm referenced tests as the results were forced into a bell shaped distribution and the top 9% (or whatever it was) received H and the bottom 9% failed.

## COURSE OBJECTIVES AND TESTING

The basic prerequisite for criterion referenced tests are sets of clearly stated objectives. Once the objectives for a course have been set, then the testing should follow immediately.Let me give you an example of what one school system did. The Winnetka School System in Winnetka, Illinois, has developed a set of goal cards for its students in grades one to eight. In Figure 1 is shown one of the goal cards for Grade 1 arithmetic and on the continuation is shown the goals for Grade 2 arithmetic.

Each child proceeds through the goals indicated on the cards (although not necessarily in the order indicated). At the end of the year the card is passed on to the next teacher and the child continues from where he left off. These cards have several advantages over the more conventional methods of recording and reporting student progress. They focus the child's attention on the task at hand, so that he knows exactly what he has to do in order to achieve the objective.

I think that this is extremely important. Too often in my school experience I have been left wondering "What do I have to do to satisfy the requirements?" Recently the Department of Educational Psychology at the University of Alberta had a one day meeting with staff and graduate students in attendance in which several facets of the graduate program were discussed. Near the end of the day, one of the students asked if it would be possible for the lecturer in each course to indicate the goals of the course and also indicate the level of performance that would constitute a grade of 9 or 8 or 7 etc. She thought that this would be a useful piece of information to know at the beginning of each course. Her question was pretty well ignored in the subsequent discussion, but I think it was an important one. We are reluctant to specify in advance what level of excellence will be required in the course. This reluctance seldom extends to examination post-mortem time when we are all too able to make some extremely fine distinctions, and tell the students what they would have had to write in order to get the 9. This is unfair, I think. I believe that the problem stems from our fear that we cannot give everybody a 9. Why can't we? If our goals are carefully specified and if they are worthwhile, then to give everybody a 9 reflects superb teaching, not poor testing.

I would suggest that the goal card could be used as a sort of contract with the student. When he reaches the level of performance that you have defined beforehand as being acceptable, then give him the grade that you have previously specified as being associated with that level of performance. In some courses, this will be awkward. In Social Studies, the levels of performance will be difficult to specify, in advance, since the goals of the course might be to produce divergent responses in the children. I will have some suggestions about this later.

A second advantage to the system is that, often, the statement of the goals makes the evalution procedure self-evident. Direct observation may be the only testing procedure needed. If the children are moving at their own pace, you will need a procedure that can be administered quickly to one child at a time. On the grade 1 card you will see the objective "Recognizes coins (1¢, 5¢, 10¢, 25¢)". After the child has been working at this objective for a while, it should be no problem for the teacher to show the student a handful of coins and ask him to state their value. This test could be done on an individual basis and would take only a few seconds to carry out and record.

Other objectives will require more formal testing procedures. For example, in a chemistry unit it might be necessary for the student to discriminate between necessary conditions and sufficient conditions for a particular reaction to occur. Such an objective might be tested using a multiple test format. But remember, the foils should be relevant to the objective. You want to discriminate between those who have mastered the objective and those who have not. It doesn't matter at all if everyone gets the item correct, provided the item is relevant. One of the techniques that I have found useful is to discuss each item after the test is over, and encourage the students to disagree with the keyed response. If you intend to do this, you have to be prepared to change the scores that you have given the students. My feeling is that the whole procedure promotes critical analysis, and improves items for future use.

## ACCEPTABLE RESPONSES

Often after the course objectives have been described, you will find that achievement can be measured using a short answer or essay test. Contrary to what my colleagues would have you believe there is nothing inherently sinful about either of these procedures. However, again, you must be very careful in the wording of the questions, and to define what you consider to be an acceptable response. And even if you do this, I think you should let the classroom lawyers have a chance to debate the merits of your correct response and to propose some of theirs. A good example of the need for this interchange is provided by Alexander Calandra in the journal *SR* of December 21, 1968:

> Some time ago, I received a call from a colleague who asked if I would be the referee on the grading of an examination question. He was about to give a student a zero for his answer to a physics question, while the student claimed he should receive a perfect score and would if the system were not set up against the student. The instructor and the student agreed to submit this to an impartial arbiter, and I was selected.
>
> I went to my colleague's office and read the examination question: "Show how it is possible to determine the height of a tall building with the aid of a barometer."
>
> The student had answered: "Take the barometer to the top of the building, attach a long rope to it, lower the barometer to the street, then bring it up, measuring the length of the rope. The length of the rope is the height of the building."
>
> I pointed out that the student really had a strong case for full credit since he had answered the question completely and correctly. On the other hand, if full credit were given, it could well contribute to a high grade for the student in his physics course. A higher grade is supposed to certify competence in physics, but the answer did not confirm this. I suggested that the student have another try at answering the question. I was not surprised that my colleague agreed, but I was surprised that the student did.
>
> I gave the student six minutes to answer the question, with the warning that his answer should show some knowledge of physics. At the end of five minutes, he had not written any thing. I asked if he wished to give up, but he said no. He had many answers to this problem; he was just thinking of the best one. I excused myself for interrupting him, and asked him to please go on. In the next minute, he dashed off his answer which read: "Take the barometer to the top of the building and lean over the edge of the roof. Drop the barometer, timing its fall with a stop watch. Then, using the formula $S=\frac{1}{2}at^2$, calculate the height of the building."
>
> At this point, I asked my colleague if he would give up. He conceded, and I gave the student almost full credit.
>
> In leaving my colleagues office, I recalled that the student had said he had other answers to the problem, so I asked him what they were. "Oh, yes," said the student. "There are many ways of getting the height of a tall building with the aid of a barometer. For example, you could take the barometer out on a sunny day and measure the height of the barometer, the length of its shadow, and the length of the shadow of the building, and by the use of a simple proportion, determine the height of the building."
>
> "Fine," I said. "And the others?"
>
> "Yes," said the student. "There is a very basic measurement method that you will like. In this method, you take the barometer and begin to walk up the stairs. As you climb the stairs you mark off the length of the barometer along the wall. You then count the number of marks, and this will give you the height of the building in barometer units. A very direct method."
>
> "Of course, if you want a more sophisticated method, you can tie the barometer to the end of a string, swing it as a pendulum, and determine the value of 'g' at the street level and at the top of the building. From the difference between the two values of 'g', the height of the building can, in principle, be calculated."
>
> Finally, he concluded, there are many other ways of solving the probelm. "Probably the best," he said, "is to take the barometer to the basement and knock on the superintendent's door. When the superintendent answers, you speak to him as follows: 'Mr. Superintendent, here I have a fine barometer. If you will tell me the height of this building I will give you this barometer'."
>
> At this point, I asked the student if he really did not know the conventional answer to this question. He admitted that he did, but said that he was fed up with high school and college instructors trying to teach him how to think, to use the "scientific method," and to explore the deep inner logic of the subject in a pedantic way, as is often done in the new mathematics, rather than teaching

FIGURE 1

## WINNETKA PUBLIC SCHOOLS
## MATHEMATICS GOAL RECORD CARD 1

Pupil .................... Teacher .................... Year ..........

---

| | Check |
|---|---|
| Can count 10 objects | ______ |
| Can read and write numerals to 10 | ______ |
| Recognizes number groups up to 5 | ______ |
| Can read and write numerals to 20 | ______ |
| Can count objects to 100 | ______ |
| Recognizes numbers to 100 | ______ |
| Can read and write numerals to 50 | ______ |
| Recognizes addition and subtraction symbols | ______ |
| *Understands meaning of the inequality signs | ______ |
| Can count objects: | |
| by 2's to 20 | ______ |
| by 5's to 100 | ______ |
| by 10's to 100 | ______ |
| Recognizes geometric figures: | |
| triangle | ______ |
| circle | ______ |
| quadrilateral | ______ |
| Recognizes coins (1¢, 5¢, 10¢, 25¢) | ______ |
| Knows addition combinations 10 and under using objects | ______ |
| Knows subtraction combinations 10 and under using objects | ______ |
| Recognizes addition and subtraction vertically and horizontally | ______ |
| *Can construct simple plane figures with straight edge and compass | ______ |
| Shows understanding of numbers and number combinations (check one) | |
| 1. Using concrete objects | ______ |
| 2. Beginning to visualize and abstract | ______ |
| 3. Makes automatic responses without concrete objects | ______ |
| *Can tell time | |
| 1. Hour | ______ |
| 2. Half hour | ______ |

* (Goals starred are not essential for all students)

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Comments:

FIGURE 1 (Cont'd.)

## WINNETKA PUBLIC SCHOOLS
## MATHEMATICS GOAL RECORD CARD 2

Pupil .................... Teacher .................... Year ..........

| | Check |
|---|---|
| Addition combinations 10 and under (automatic response) | ______ |
| Subtraction combinations 10 and under (automatic response) | ______ |
| Can count to 200 | ______ |
| Can understand zero as a number | ______ |
| Can understand place value to tens | ______ |
| Can read and write numerals to 200 | ______ |
| Can read and write numeral words to 10 | ______ |
| Can read and write number words to 20 | ______ |
| Use facts in 2-digit column addition (No carrying) | ______ |
| Roman numerals to XII | ______ |
| Can tell time: | |
| Half hour | ______ |
| Quarter hour | ______ |
| Calendar (months, days of week, dates) | ______ |
| Coins and their equivalent value to 25¢ | ______ |
| Recognition of 50¢ coin and $1.00 | ______ |
| Recognize and use 1/2, 1/4, 1/3 of a whole | ______ |
| Addition facts to 18 (aim for mastery) | ______ |
| Subtraction facts to 18 (aim for mastery) | ______ |
| *Can identify simple plane figures: | |
| Quadrilateral | ______ |
| Pentagon | ______ |
| Hexagon | ______ |
| Octagon | ______ |
| *Can use compass to bisect line segment, contruct triangles, and construct perpendiculars | ______ |
| Word problems: (check one) | |
| 1. Can set the problem up | ______ |
| 2. Can understand process involved | ______ |
| 3. Can notate word problems | ______ |

* (Goals starred are not essential for all students)

Comments:

him the structure of the subject. With this in mind, he decided to revive scholasticism as an academic lark to challenge the Sputnik-panicked classrooms of America.

This example illustrates what I was trying to point out earlier. If your goal is divergent thinking, or creativity, then I would suggest that to unilaterally decide what constitutes a correct answer is to change the goal from divergent thinking to convergent thinking. And make no mistake, the students quickly learn to distinguish between what you say your goals are, and the things that you test for.

A third advantage to the system is that it tells the teacher at a glance where his students are, and therefore is a useful means of reporting progress.

Finally, by setting out the goals in this fashion, it it likely that the teacher will concentrate on developing appropriate teaching strategies to meet these goals.

## STATING OBJECTIVES

Let me say a few words about the statement of the objectives. The ones shown in the figures are useable only because we all understand them in about the same way. In other subject areas this is less likely to be so. For example, in the social studies units that are tested in the test which you did earlier, the goals would be much more difficult to spell out unambiguously. The guidelines are these: you should try to specify the behaviors that the child should exhibit following the learning; you should try to specify the level of competence to be attained for each level of the grading scale; and, you should try to specify the conditions under which the behavior should occur. To carry out these specifications to the letter would be an impossible task for a teacher in one year. But by successively approximating the goals an acceptable statement will result over a number of years. For example, over the years you might go from a statement like, "knows about the Riel Rebellion" to statements like: "can list all of the events leading up to the Riel Rebellion in chronological order;" "can describe the living conditions of the Metis in the Manitoba area prior to the Rebellion;" "can specify the arguments for and against the hanging of Riel." These objectives are more specific than the global one that was stated earlier. They can be specified even further.

One of the stickiest problems that you are likely to encounter in your evaluation activities occurs with objectives in the Affective domain. Often one of the goals of a program is to bring out some attitude change on the part of the students. For example, one of the goals of a literature program might be to make the students favorably disposed to use libraries, or a goal of a social studies program might be to make the students become more conscious of the effects of pollution and aware of the steps that they might take to reduce it. There are many ways that achievement of these goals might be measured, but any way that involves the use of direct measurement (such as a test or a questionnaire) would tend to show favorable results that might not generalize to non school activities. Attitudes can best be measured unobtrusively. I am *not* suggesting that you use the methods that I am about to describe in order to arrive at grades on a report card. I do suggest that you use them to evaluate the success of your curriculum. If you ask the students to record the number of books that they take from the library, then at best they may start taking out books to fill out their lists and at worst they may just fill in the titles without taking out the books. One way of getting around this is to keep records in your library and compare the number of books taken out before the literature unit with the number of books taken out after. For the second objective, rather than asking the students if they know how to stop pollution, why not keep track of the amount of refuse scattered about the school before and after the course? These unobtrusive measures are really just attempts to get behavioral manifestations of attitudes. Any one measure may not be definitive, but together they often provide a pretty accurate picture of how successful you have been.

## CONCLUSION

So here you are. I have been talking about many things, some fairly technical, most of them common sense. What do you as principals do now? One thing would be to counsel your teachers to look at their test papers closely and ask themselves the question "Do these questions reflect the objectives that I have for this course?" "Do they reflect the depth and breadth of what is important?" If the answers to these questions are no, then the fault probably does not lie with their abilities as "achievement metricians," but likely lies with their not having made their objectives explicit. I would recommend Kibler, Barker and Miles' book, "Behavioral Objectives and Instruction" to their attention.

Evaluation is a two sided procedure. The instruments and results say as much about the teaching and the curriculum as they do about the student. I urge you to behave accordingly.

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# PREPARING THE TEACHERS WE NEED*

**H. T. COUTTS**

## PRELUDE

*Margie even wrote about it that night in her diary. On the page headed May 17, 2155, she wrote, "Today Tommy found a real book!"*

*It was a very old book. Margie's grandfather told him that there was a time when all stories were printed on paper.*

*They turned the pages, which were yellow and crinkly, and it was awfully funny to read words that stood still instead of moving the way they were supposed to— on a screen, you know. And then, when they turned back to the page before, it had the same words on it that it had when they read it the first time.*

*"Gee," said Tommy, "what a waste. When you're through with the book, you just throw it away, I guess. Our television screen must have had a million books on it and it's good for plenty more. I wouldn't throw it away."*

*"Same with mine," said Margie. She was eleven and hadn't seen as many telebooks as Tommy had. He was thirteen.*

*She said, "Where did you find it?"*

*"In my house." He pointed without looking because he was busy reading. "In the attic."*

*"What's it about?"*

*"School."*

*Margie was scornful. "School? What's there to write about school? I hate school." Margie always hated school, but now she hated it more than ever. The mechanical teacher had been giving her test after test in geography and she had been doing worse and worse until her mother had shaken her head sorrowfully and sent for the County Inspector.*

*He was a round little man with a red face and a whole box of tools with dials and wires. He smiled at her and gave her an apple, then took the teacher apart. Margie had hoped he wouldn't know how to put it together again, but he knew how all right and after on hour or so, there it was again, large and black and ugly with a big screen on which all the lessons were shown and the questions were asked. That wasn't so bad. The part she hated most was the slot where she had to put homework and test papers. She always had to write them out in a punch code they made her learn when she was six years old, and the mechanical teacher calculated the mark in no time.*

*The Inspector had smiled after he was finished and patted her head. He said to her mother, "It's not the little girl's fault, Mrs. Jones. I think the geography sector was geared a little too quick. Those things happen sometimes. I've slowed it up to an average ten-year level. Actually, the overall pattern of her progress is quite satisfactory." And he patted Margie's head again.*

*Margie was disappointed. She had been hoping they would take the teacher away altogether. They had once taken Tommy's teacher away for nearly a month because the history sector had blanked out completely.*

*So she said to Tommy, "Why would anyone write about school?"*

*Tommy looked at her with very superior eyes. "Because it's not our kind of school, stupid. This is the old kind of school that they had hundreds and hundreds of years ago." He added loftily, pronouncing the word carefully, "Centuries ago."*

*Margie was hurt. "Well, I don't know what kind of school they had all that time ago." She read the book over his shoulder for a while, then said, "Anyway, they had a teacher."*

*"Sure they had a teacher, but it wasn't a regular teacher. It was a man."*

*"A man? How could a man be a teacher?"*

*Well, he just told the boys and girls things and gave them homework and asked them questions."*

*"A man isn't smart enough."*

*"Sure he is. My father knows as much as my teacher."*

*"He can't. A man can't know as much as a teacher."*

*"He knows almost as much I betcha."*

*Margie wasn't prepared to dispute that. She said, "I wouldn't want a strange man in my house to teach me."*

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*This paper, presented to the 1970 Leadership Course for School Principals, was delivered initially to the CEA Short Course in Education, in Banff, May 19, 1970.

*Tommy screamed with laughter, "You don't know much, Margie. The teachers didn't live in the house. They had a special building and all the kids went there."*

*"And all the kids learned the same thing?"*

*"Sure, if they were the same age."*

*"But my mother says a teacher has to be adjusted to fit the mind of each boy and girl it teaches and that each kid has to be taught differently."*

*"Just the same they didn't do it that way then. If you don't like it, you don't have to read the book."*

*"I didn't say I didn't like it," Margie said quickly. She wanted to read about those funny schools.*

*They weren't half finished when Margie's mother called, "Margie! School!"*

*Margie looked up. "Not yet mamma."*

*"Now," said Mrs. Jones. "And it's probably time time for Tommy, too."*

*—Isaac Asimov*

## ON THE PAD

We enter the 70's challenged by tasks that face us as a result of our seeming inability to modify economic, political and social institutions and procedures fast enough to accommodate to our technological inventiveness. Though we can place astronauts on the moon—and bring them back to earth—we have not been able to meet adequately the problems of conservation, pollution, poverty, and war. Our greatest hope of doing so lies in redirected commitments. Gardner, a former United States Commissioner for Education, has identified the following significant commitments:

1. A commitment to build an *enduring peace* based on mutual understanding, tolerance, and adherence to the rule of international law.

2. A commitment to assist *developing nations* in their efforts to reduce illiteracy and poverty and to achieve at least a substantial number of their expectations on the economic and social front.

3. A commitment to assist the world toward a growing understanding of the seriousness that faces it unless attention is given to *population control* without which the present world population of approximately 3.3 billion may well reach 7.5 billion by the end of this century, and without which starvation is more likely to be the rule rather than the exception.

4. A commitment to provide *equal opportunity* regardless of race, creed, color, religion, or language and in the process to remove the barriers of poverty, illness, and ignorance.

5. A commitment to give those educational opportunities that will provide *maximum fulfilment* for each individual. "The deepest personal defeat suffered by a human being," writes Ashley in *The Cultured Man,* "consists of the difference between what one was capable of becoming and what one has, in fact, become."

6. A commitment to *restore life to urban centres* by resolving, where they exist, problems of apathy, crime, poverty, racial conflict, slum housing, inferior schools and hospitals, and inadequate transportation.

7. A commitment to *conserve and restore man's natural environment* now being threatened by pollution of air and water supply, reduction of its green oxygen-producing cover, and destruction of essential parks and playgrounds.

8. A commitment to *reshape government* to meet the needs of society at all levels: local, regional, national, world-wide.

9. A commitment to promote *economic growth* in balanced fashion without which most other commitments cannot be met.

10. A commitment to provide each *individual* the opportunity for self-realization through a productive and satisfying life.

Surely, if we accept these commitments, education becomes more than "the art of making available to each generation the organized knowledge of the past" and "the aggregate of all processes by means of which a person develops abilities, attitudes, and other forms of positive value in the society in which he lives." Much of the unrest in society today and of uncertainty in education stems from the fact that there is too little evidence that sincere commitments have been made. I am convinced that the new generation have found us wanting and are not prepared to accept the situation without protest.

There is, as one of my fellow deans expressed it, a new race of students in our schools and universities. Their background, knowledge, outlook, aspirations, and concept of society are such that they intend to participate in decision making, to debate controversial issues, and to be masters, not servants, of technological hardware. "The new student . . . ," writes Sam Chapman in the March 1970 issue of *School Progress* "expresses concern for other people which manifests itself in his demonstrations against the inhumanity of wars, in his intolerance of discrimination against minorities, and in his various overt reactions against suppression of inherent personal rights of those groups. He has no respect for social organization which allows poverty to exist side by side with affluence."

The new student is, in addition, a realist who is not prepared to accept irrelevancies in curricula, inadequacies in teaching, and inefficiency in administration. He is concerned about values, including his own, and is anxious about his future, and especially about his chances of succeeding.

### THE BLAST OFF

In face of change, most educational traditions have been questioned. The curriculum is being modified constantly. The hallowed subjects will never be the same again, if they survive at all. The new math replaced the old only to be challenged by I know not what. The formal type of matriculation examination in which Canadians for generations have placed almost unquestioned faith has disappeared from all but one Canadian province, and that—by the way—the province that was once described as "the experimental laboratory" of Canadian education. Further examples are unnecessary to illustrate my contention that education in elementary and secondary schools—and indeed in colleges, institutes, and universities —is in flux. We have adopted without too much critical analysis and very little research a whole host of innovations including team teaching, computer assisted instruction, and open area classrooms.

Where, please tell me, will we go from here? I've attended enough conferences, heard enough far-out speakers, and read more than a modest number of predictions to be convinced of what the late H. C. Newland once said when the so-called Enterprise (an Alberta version of the activity movement) was being introduced: "We don't know where we're going, but we're on our way. Fortunately we can never come back." Well, again in the 70's, we are on our way. I believe this is inevitable and, within limits, desirable. It doesn't, however, make it any easier for me to tell you with any surety how teachers are to be prepared for a decade which is sure to be marked by curricular, organizational, and methodological fluidity. But it does underline one thing: any teacher education program designed for the 70's must prepare flexible and adaptable teachers.

But there are other factors which compound the problem. No longer is the task of teacher education and training merely one of preparing generalist teachers for elementary or specialist teachers in academic disciplines for secondary schools. One must provide preparation for teaching preschool children at one end of the continuum and adults at the other. There must be appropriate preparation for those who will teach the gifted as well as the emotionally, mentally, and physically handicapped. There must be adequate programs for teachers of the new industrial arts and of the many vocational programs to be offered in secondary and post-secondary schools. There must be provision for preparing a whole host of other professionals: guidance counsellors, school psychologists, speech therapists, administrators, planners. There must be teachers and administrators trained to give leadership in intercultural settings both at home and abroad. And there must be programs to prepare paraprofessionals: teacher aides, technicians, demonstrators, and the like.

### TOWARD THE UNKNOWN

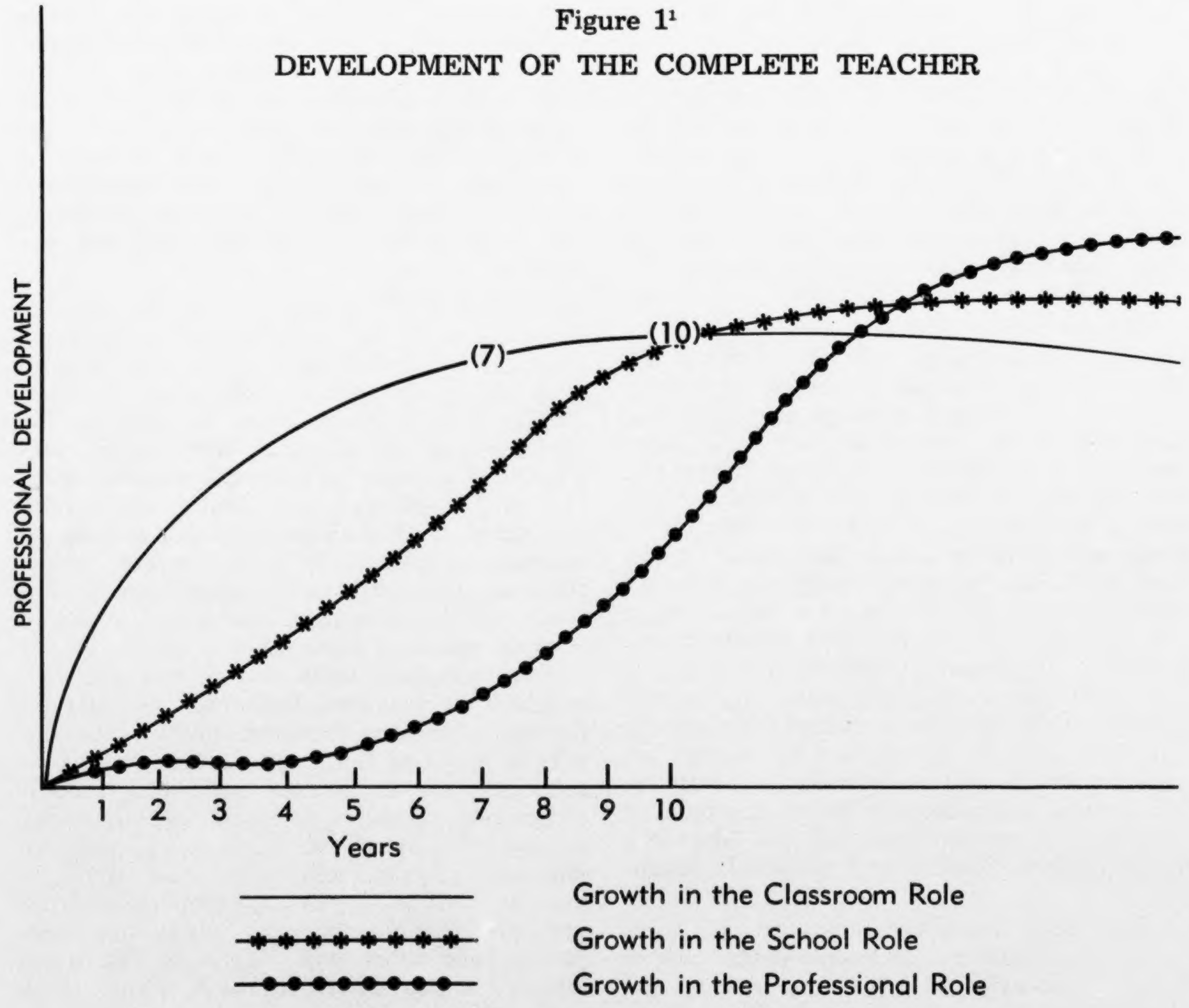
I believe that I could tell you reasonably well what *is* being done in teacher education and teacher training in Canada today— and some very good things are being done. But I was asked to speak about teacher preparation—the teachers we need—in the seventies. Unfortunately I am no seer. I shall have to request your forbearance then while I engage in a few speculations during our journey into the future and the unknown.

SPECULATION: *There will be shortages in some teaching specializations and in some geographical locations in spite of a general surplus of qualified teachers.* Norman France has estimated that in spite of the uncertainties of changing birth rates, employment patterns of married women teachers, and class size, we shall require only 250,000 to 270,000 elementary and secondary teachers in Canada by 1980. Present indications are that our teacher education institutions will be able to prepare and maintain a gross teaching force of this order. But it will remain difficult to attract well-qualified teachers to the less desirable locations on Canada's isolated frontiers and in the deprived areas of her larger cities. It will be difficult, too, to recruit and hold enough competent teachers in such specializations as early childhood education, industrial arts, women's physical education, and the fine arts. In general, however, competition from younger, abler, and more adequately prepared candidates will likely result in an over-all improvement in the teaching force in Canada.

SPECULATION: *Improved programs of teacher preparation together with increased opportunities for inservice activities and re-education will strengthen teaching as a profession.* In spite of what one hears concerning the disappearance of the fixed classroom or even of the open-area multi-classroom in favor of a variety of far-flung educational settings, I believe that some fixed base (called a classroom in a place called a school) will remain long beyond this decade. But whether or not this is so, the teacher will continue to have an important classroom-type role. Speculating on the professionalization of the teacher, Tiedeman in 1956 advanced the interesting hypothesis that at all times the good teacher is growing in his classroom role (largely the technical and skill aspects of teaching), his school role (largely the broader human relations aspect of teaching), and his professional role (largely the more highly conceptual aspect of teaching); that growth in the first of these (the classroom role) has a rapid initial increment during the first four or five years of experience and thereafter changes little; that growth in the school role, while it starts more slowly, reaches full development toward the end of the first decade of teaching experience; and that growth in the professional role, which develops more slowly at first, continues throughout the full teaching career and is the mark of the mature, satisfied, and successful teacher. This is why the tools for continuing and re-education are an essential ingredient of pre-service teacher education programs.

Figure 1[1]

DEVELOPMENT OF THE COMPLETE TEACHER



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[1] Adapted from Tiedeman

SPECULATION: *There will be greater attention given to selection of candidates for teaching both before and during pre-service programs.* While there was a gross teacher shortage, criteria for selection of candidates for teaching were not often used. Those who did use them were less than satisfied. With the anticipated improvement in the supply situation, we should in the 70's expect greater attention to be given to selection. Attention will extend beyond academic standing to such factors as personality, speech, interest, general suitability, and commitment. Difficult as such factors are to evaluate, teacher education institutions, in cooperation with the teaching profession, will try. Some candidates will be counselled not to enter teacher education programs; others will be guided out at various stages. In fairness, that guidance should be given as soon as possible.

In connection with selection, we have little secure research data. This remains a wide-open area for serious controlled evaluative and predictive studies and they must be done.

SPECULATION: *There will be, before first certification, basic four-year programs of teacher preparation beyond admission to the universities where the preparation will be given.* This will apply to all teachers—elementary and secondary—and will in most instances include a university degree: B.A., B.Comm., B.Ed., B.Sc., and the like. There are many advantages in preparing teachers in a university setting, but the one I wish to stress here is the foundation which can be given through academic and professional disciplines as a basis for the flexible, inquiring, and developing mind necessary for the teacher in a rapidly changing environment. Nothing short of a four-year program will be considered adequate for the preparation of a professional teacher suited to the needs of the schools of the 70's. In certain educational jurisdictions even longer periods of teacher preparation will be required. The need for a basic four-year period of preparation will be more apparent after we have identified what we believe to be the essential components of an adequate teacher education program.

SPECULATION: *The basic components of teacher education programs will remain relatively constant but the proportion of the components in the mix will vary.* The effective teacher of the future will be a sensitive, understanding, and learned person who knows the *what,* the *why* and the *how* of his profession. In 1900 Dean Russell of Teachers' College, Columbia University, set guidelines for teacher education when he wrote:

> Presupposing a personality endowed with good-will, taste, and common sense, the teacher needs (1) *general culture* liberal enough to inspire respect for knowledge, broad enough to justify independent judgments, and accurate enough to beget a love of truth . . . (2) *special scholarship* sufficient for the work to be done, to give that absolute command of the subjects of instruction which frees the teacher from slavish adherence to manuals and methods . . . (3) *professional knowledge* to view the subjects he teaches and the entire course of instruction in its relations to the child and society . . . (4) *technical skill* in the use of his tools which the artist in every vocation must have.

*Teacher Education: A Reappraisal* edited by Elmer R. Smith in 1962 presents diagramatically the components of teacher education much as I speculate they will remain during the 70's. The components, all of which feed into and eventuate in practice, are (A) general and liberal education, (B) specialized knowledge in the area(s) of teaching concentration, (C) relevant knowledge from the behavioral sciences, (D) relevant knowledge from the humanities and social sciences, (E) the application of the humanities and social sciences to the role of the school in society, (F) the application of the behavioral sciences to teaching and learning, (G) the application of specialized knowledge, the humanities and social sciences, and the behavioral sciences to school curricula and to methodology. (See Fig. 2, p. 70)

In a revision of its teacher education program for the 70's, the Faculty of Education at The University of Alberta adopted a basic model with the following six components:

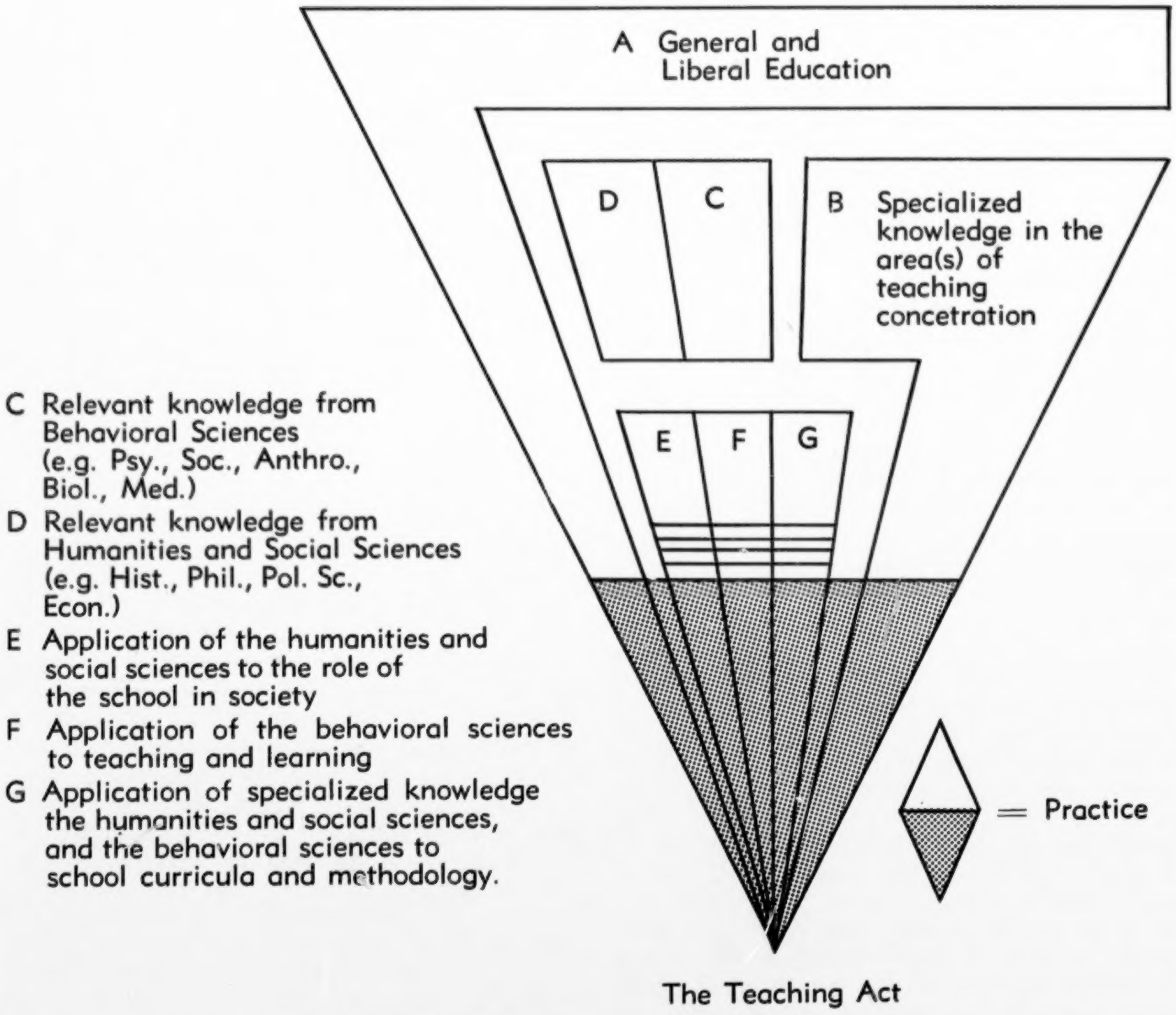
Table 1
THE COMPONENTS

a. Non-education: *Arts, Science, Engineering, etc.*
b. Teaching Specialization: *Arts, Science, Fine Arts, Industrial Arts, etc.*
c. Student Teaching
d. Curriculum and Instruction
e. Basic Education: *Educational dimensions of administration, psychology, sociology, philosophy, etc.*
f. Free Options

These differ little from the components in the diagram from Smith. But the Faculty of

Figure 2

A DIAGRAM FOR TEACHER EDUCATION


A General and Liberal Education
D
C
B Specialized knowledge in the area(s) of teaching concetration
E
F
G
C Relevant knowledge from Behavioral Sciences (e.g. Psy., Soc., Anthro., Biol., Med.)
D Relevant knowledge from Humanities and Social Sciences (e.g. Hist., Phil., Pol. Sc., Econ.)
E Application of the humanities and social sciences to the role of the school in society
F Application of the behavioral sciences to teaching and learning
G Application of specialized knowledge the humanities and social sciences, and the behavioral sciences to school curricula and methodology.
= Practice
The Teaching Act

Smith, Elmer R. (Ed.) *Teacher Education: A Reappraisal.* New York: Harper and Row, 1962, p. 189.

Education went further to provide a range of course equivalents for each component:

Table 2

COMPONENT MODEL

| | Minima Course Equivalents | Maxima Course Equivalents |
|---|---|---|
| a. Non-Education | 4 | 7 |
| b. Teaching Specialization | 3 | 6 |
| c. Student Teaching | 1 | 2 |
| d. Curriculum and Instruction | 1 | 4 |
| e. Basic Education | 3 | 5 |
| f. Free Options | 2 | 5 |

(Courses in each component are left unspecified to provide flexibility)

This component model will make possible the development of many individual plans to serve different approaches and purposes. For example, within this component model, it will be possible to develop plans for preparing elementary, secondary, industrial arts, and vocational education teachers in a variety of specializations while at the same time giving secondary support in such areas as special education, intercultural education, or an academic minor. The component model also makes possible flexibility of approach. Some parts of the program, for example, may be presented through discrete courses, others through integrated units which lend themselves to team teaching.

**SPECULATION** *There will be innumerable models of teacher preparation within any accepted set of components.* In one of his incisive statements in *Sartor Resartus* Carlyle wrote that "Any road will lead you to the end of the world." Because of the many variables in man, in society, and in education, no one best plan for the preparation of teachers will be found in the 70's. Rather, and I believe that this will be salutary, there will be greater diversity in programs and procedures in teacher education. And many of these programs—perhaps most—will prove effective for the purpose and in the setting for which they were designed. Some of them will fail. None of them, I am convinced, will be perfect. But in the aggregate they will provide society with increasingly able and effective teachers.

Anyone interested in teaching and teachers is fully aware of the keen interest recently shown in designing teacher education programs. In the United States the AACTE (Association for Accreditation of Colleges of Teacher Education) in 1968-69 revised its *Standards for the Accreditation of Teacher Education* and produced its publication entitled *Teachers for the Real World.* The latter, which calls for radical changes in teacher education programs, recommends models that provide schemes for the analysis of teaching into tasks to be performed; training situations and exercises for the development of teaching skills and techniques; classification of training situations by tasks, abilities, skills, grade level, fields of instruction, and the backgrounds of the pupils; and establishment of training complexes to provide a controlled and realistic practicum.

The United States Office of Education in 1967 provided 1.5 million dollars to stimulate the development of model teacher education programs on the basic guidelines which a group of creative, forward-looking, and qualified educators had formulated. Of the 80 proposals submitted nine were funded. These nine, varying in many of their details and emphases are reported to include trends toward greater individualization, stress on performance criteria, involvement of the affected parties in decision-making, use of modern technologies in one way or another, and increases in the amount of laboratory experience.

It remains for these nine model teacher education programs—and at least some of the 71 which were not funded—to be tried out and evaluated in the 70's.

There is scarcely a teacher education institution, a teachers' organization, or a provincial department of education in Canada that is not planning new or revised programs for the decade ahead. It would be impossible and indeed fruitless for me to describe the many Canadian models that have been or are being proposed or developed for the 70's.

A far-out model was proposed to the Canadian Teachers' Federation by John Macdonald of Sir George Williams University. It is described in his stimulating publication entitled *The Discernible Teacher* with its emphasis away from the kinds of schools we know and toward a team approach to teaching that calls for highly trained specialists, demands superior quality of teaching and learning, and is frightfully expensive. I believe that this model will still be theoretical in 1980. But who knows for sure!

To me, one of the more fascinating models is that which was formulated by Archie MacKinnon and his colleagues and introduced at Simon Fraser University which, as a new institution, was free of the strong hand of tradition. The model is based on the assumptions that "pre-service and in-service preparation of teachers are parts of a continuum," that "combination of theory and practice in teaching should occur in an immediacy of learning," that "no living organism is assisted in its growth by giving it something it does not need," and that "time needs to be extended and managed to allow persons to take responsibility for their own learning and to provide a safe content for experimentation for continuous learning throughout life." From these assumptions there is developing a fresh approach to the organization of the components of the teacher education program, of the approach to university teaching, but especially of the knitting together of field experiences and theory. The model is worth examining in detail. I wish to comment on only one aspect. The Simon Fraser Faculty of Education appoints classroom teachers as Associates in Education. At an early stage in the program groups of four education students are assigned to an Associate in Education and his class for an eight-week period of directed observation and participation. At a later stage the education student, under another Associate in Education, takes full responsibility for a class for an eight-week period. In both cases the experiences are tied to the student's university studies in the behavioral sciences and in curriculum and instruction or, if you will, methodology.

I wish there were time to tell you about some of the many other models planned or being planned for the 70's. They make fascinating listening. But I have made my point about diversity and the value of it.

I wish it were possible to convince those who certificate teachers in this country that no province has an option on teacher preparation programs and that good teachers are produced by a variety of models.

SPECULATION: *Both concurrent and sequential programs of teacher education will improve in quality and acceptability.* While my friends in Upper Canada, where I was born and had a substantial part of my own education, have been resistant to concurrent teacher education programs at university level, the prognosis for the 70's is hopeful. If one believes, as I do, that all teachers must be professional peers and that teacher education can be a total university commitment, the concurrent model has many advantages: it permits the preparation of teachers in a full range of teaching fields; provides early identification and commitment to teaching as a profession; develops academic and professional components in meaningful relationships; and enables the future teacher to plan a program most suited to his goals whether these be related to early childhood education, subject specialization in the secondary school, industrial education, special education, and the like. I anticipate that during the 70's an increasing number of teachers will be prepared on concurrent programs leading to some degree as the B.Ed. Paralleling this model, for both elementary and secondary bound teachers, will be improved versions of the sequential approach. Both routes to teacher preparation will improve during the years ahead, and as a result will gain in credibility. Together they will develop highly competent and successful teachers for the ever-widening demands of society.

SPECULATION: *The technologies will be used more effectively in teacher education with greater emphasis on software than on hardware.* While it will never replace the human element necessary in the artist teacher, the new technology will help him to communicate more effectively, analyze his procedures more realistically, and reenforce those of his approaches aimed to stimulate learning and to develop attitudes, skills, and appreciations. Film clips will provide one avenue of simulation, video tapes and closed circuit television will permit so-called microteaching, and computers will assist instruction. These will be only a few of the pertinent technologies which will be an integral part of basic teacher education programs. The technologies will not be ends in themselves, but means to improved communication, instruction, and understanding. Not only will they be useful in the educational and training programs of prospective teachers, but mastery of their use will be a necessary dimension of the instructional techniques of the successful and vital teacher. "Effective education of prospective teachers," writes Vance in *Preparing Educators to Meet Emerging Needs,* must become a living model of effective ways to make use of the new technology in the classroom or this new technology won't even get to the classroom on any large scale."

But more important than the use of technological aids to teaching are the programs for which they provide the vehicle. I predict that we will make greater use than we do now of video tape to pick up for further study a variety of teaching-learning situations. Writing programs for Computer Assisted Instruction will not only provide sequences to strengthen and enrich curricula at all levels, but will demand critical examination of orderly development and structured thinking related to teaching and learning in a way that has never been done so effectively before with the possible exception of the application of logic by some of the great philosopher-teachers. Most university colleges or faculties of education are already in the forefront through their provisions of technological equipment for use in the teaching, research, and materials centres of their operation. But more important is the improving quality of the staff dedicated to the necessary educational and evaluative implications. As colleges and faculties of education plan—as they are now doing—for the decade or two ahead, provision must be made for the physical and human resources required.

SPECULATION: *More educationally productive and professionally effective ways will be found to relate theory and practice and to improve communication between teacher education institutions and the field.* In spite of the improvements that have been made in teacher preparation during the last quarter century, the problem of effectively relating practice to theory is largely unsolved. Teachers' organizations, administrators and supervisors, teacher education institutions, and neophyte teachers themselves are generally critical of provisions made through student teaching and internship programs. It is generally agreed that the amount of practice is less important than the quality, the kind, and, what is increasingly important, the setting. Some teachers must function in situations that differ significantly from one another. These will include heterogeneous classrooms in urban and rural locations, classrooms for the gifted in the suburbia, classrooms for the disadvantaged in the centre city and on the frontier, and classrooms for specialized groups ranging through the mentally and physically handicapped, the industrially and vocationally oriented, the academically inquisitive, and the artistically creative. During the 70's teacher education institutions, in co-operation with the teaching profession, school systems, and departments of education will continue to seek solutions. Many plans will be tried. These will involve the integrating of experience and theory throughout the four years of the teacher education program, an emphasis on the mastery under self-analysis of unit teaching skills (sometimes referred to as modules), a tryout of extended internships co-operatively planned and supervised by the teacher education institution and the school system, and an attempt to give individualized field experiences in a wide range of locations and of areas of teaching concentration and concern. Every model of teacher education in the 70's will stress the importance of the practice component.

But in spite of improved opportunities for linking theory and practice in precertification programs, they will never remove the realities, and in many instances the shock, of the first year of teaching. It is here that a goodly number of potentially capable and creative teachers are lost to the profession. The 70's will see an effort to improve this situation through better placement and orientation. I anticipate that beginning teachers will be given reduced loads in teaching specializations related to their preparatory programs, that they will be guided and counselled by experienced teachers who are also given reduced loads, and by principals and other administrative and supervisory personnel. Of course this transitional year will involve the time of professionals and the support of trustees. It will be criticized because it will be costly. But I submit that what we now too often do can be more costly in both material and human terms.

I do not want to leave this important question without declaring my faith in the non-practice components of the teacher education programs of the 70's. Surely from what I have said throughout this paper it is apparent that I believe that the teacher who continues to grow professionally requires a sound foundation in general education and in pedagogical theory as a base from which to grow and to enrich both his own life and that of his pupils. Involved in this is the necessity of providing through teacher education, as through other professional and academic programs, the spirit of inquiry, the tools of learning, and the motivation for continuing development. In other words teacher preparation programs, while placing greater emphasis on the training component for immediacy, must give even greater attention than ever before to the dimensions of flexibility, individuality, creativity, and growth.

Without comment, I shall mention additional speculations I have with respect to the teachers we need in the 70's:

SPECULATION: *The methodology of teacher education will be an intelligent blend of a variety of means of presenting knowledge, stimulating ideas, raising questions, involving all participants, and motivating immediate and continuing learning.*

SPECULATION: *There will be increasing involvement of the teaching profession in teacher education and certification: selection, program planning, curriculum development, field experiences, supervision, evaluation, induction, orientation and certification.*

SPECULATION: *Teacher education and curriculum development in schools will move into a closer relationship.*

SPECULATION: *Greater attention must and will be given to research in education, and especially teacher education, to help us establish firmer bases for what we do.*

## IN ORBIT

I must apologize for not having reached an orbit that is as far out as that anticipated by some of my friends in education. Let me say by way of explanation that I believe in change—both that dimension which is necessary to remain in fashion and that which represents positive advancement. I believe, too, in innovations for the purpose of trying out promising hunches or hypotheses. But positive change will come only when those promising hypotheses have been subjected to the rigor of a productive type of research that needs to be done. What I shall be content with in the 70's is the development and refinement of teacher preparation models that will provide—as much as this is possible—well educated, adaptable, understanding, skilful, creative, and responsible teachers dedicated to the needs of a flexible society.

As we continue in orbit, I ask you to reflect with me on this slight adaptation of a statement attributed to Martial:

Some of the facts I never knew;
Some errors quite escaped my sight;
Some things I worked at got askew;
Some pages are obscure, if right.—
I own the truth of all you say,
But [talks] are are made no other way.

## POSTLUDE

*Margie went into the schoolroom. It was right next to her bedroom, and the mechanical teacher was on and waiting for her. It was always on at the same time every day except Saturday and Sunday, because her mother said little girls learned better if they learned at regular hours.*

*The screen was lit up, and it said: "Today's arithmetic lesson is on the addition of proper fractions. Please insert yesterday's homework in the proper slot."*

*Margie did so with a sigh. She was thinking about the old schools they had when her grandfather's grandfather was a little boy. All the kids from the whole neighborhood came, laughing and shouting in the schoolyard, sitting together in the schoolroom, going home together at the end of the day. They learned the same things so they could help one another on the homework and talk about it.*

*And the teachers were people . . .*

*The mechanical teacher was flashing on the screen: "When we add the fractions 1/2 and 1/4—"*

*Margie was thinking about how the kids must have loved it in the old days. She was thinking about the fun they had.*

—Isaac Asimov

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# THE PRINCIPAL IN THE 1970's

*(The Focus of Change)*

**F. X. BISCHOFF**

## INTRODUCTION

The theme for the Western Canada Educational Administrators' Conference at Banff (Fall, 1969) was entitled *Designs for the Seventies.* The 1950's and 1960's were decades of experimentation. Goodlad, Trump, Blount, Shaplin, Anderson and many others speak of various kinds of experimentation that are being conducted in the United States and Canada under the nomenclature of staff utilization, independent learning, learning resource centres, computerized learning, and differentiative learning. Experiments have been conducted with class size, time modules, modular time tables and non-gradedness. Very recently we have heard about the change in physical facilities such as open area concepts—technological advances have occured that leave us gasping. It is because of the work of men, such as these, that research has shown that any or all of these concepts will work, depending upon the staff that is implementing them. They have shown that if the staff is open and has the right motivation, education can become exciting for our young people. It is because of the work of innovators that the following ideas have emerged:

1. It is certain that individual differences can be recognized and educational programmmes tailored to meet them.

2. Instructional time can be used more effectively; there is nothing sacred about the 40 or 45 or 37½ or 80 minute period.

3. Human talents can be utilized more effectively— thirty students or twenty-five students and one teacher is not always the best arrangement.

4. The curriculum can be organized effectively in many different ways.

5. Technology offers much promise for education, both in terms of instruction and administration.

6. Physical facilities can be more fully utilized to facilitate the educational process. The school building should reflect the instructional programme.

Let us not get the impression that these are American trends. It may be true that this is where some of the foremost thinking has been going on. However, the Hall-Dennis Report, published in 1968, makes this particular statement:

> Very many other and important changes and innovations require consideration. The lock-step structure of past times must give way to a system in which the child will progress from year to year throughout the school system without the hazards and frustrations of failure. His natural curiosity and initiative must be recognized and developed. New methods of assessment and promotion must be devised. Counselling by competent persons should be an integral part of the educational process. The atmosphere within the classroom must be positive in encouraging the fixed position of pupil and teacher, the insistence on silence and the punitive approach must give way to more relaxed teacher-pupil relationship which will encourage discussion, enquiry and experimentation and enhance the dignity of the individual.
>
> The curriculum must provide a greater array of learning experiences than heretofore. Classes must be mobile within and beyond the local environment and the rigid position of education must yield to a flexibility capable of meeting new needs. These and other innovations will be aimed at developing in the child a sense of personal achievement and responsibility commensurate with his age and ability to the end that going to school will be a pleasant, growing experience and that as he enters and passes through adolescence he will do so without any sudden or traumatic change and without a sense of alienation from society. (*Living and Learning,* p. 14)

You probably are amongst the several hundred best educators in North America, since Alberta ranks high amongst the many systems that we know. You are approaching the apex of your careers. You were selected to be administrators because you were good at the job as people perceive the principalship. You were persistent in getting through your academic programmes, your high school and university programmes and have learned your lessons well in doing the kinds of things that society has set for school administrators to do. You have learned what former administrators have done to keep the ship floating on an even keel.

## THE PRINCIPAL'S TASK — A CHALLENGE

So what do we do? We deal with all our various publics. A big proportion of our time is spent dealing with kids, lates, minor disciplinary problems, lack of completed assignments, attendance, personality conflicts, etc., etc., etc. Your staff needs more materials and fewer inattentive students. The parents you deal with too often misunderstand what the school is attempting to do and how it is attempting to do it. School board personnel often react from crisis to crisis, reflecting the moods of the publics they serve. So we spend our time vulcanizing each pressure point as it is about to burst.

So here we are—on the one hand we're told that the decades of the 50's or 60's were decades of experimentation. Research has shown that we can do at least as good a job by using the kinds of rearrangements and the kinds of techniques that have been suggested. On the other hand we are so busy doing these vulcanizing jobs that we have been programmed to do, that we end up having no time left to sit down and do some implementation of our own. I submit that the 70's must be the decade of implementation or else we're going to get run over. It's interesting to me that the Western Canada Educational Administrators' Conference this fall is entitled *Revolution to Resolution —New Direction for the 70's.* I submit that unless we do implement, there is going to be revolution and it is going to be much more difficult to resolve revolution than it is to lead the way. We are very far behind. We haven't followed fast enough. We have been afraid to lead with our chin. You have heard of the philosophic turtle who can't make any progress unless he sticks his neck out.

What are we to do in education? Do we maintain the status quo? Or do we assist our young people to progress toward the future world? Do we take a child and help him grow into manhood? Are we artists or are we technicians? We must take a child, give him a programme that is based on his strengths. We must help him overcome his weaknesses and reach an acceptable standard of strength—but, in the final analysis, emphasize his strengths. If we do this, this child will succeed. He will realize his worth. He will maintain those parts of the status quo worth maintaining and he will build to the future.

We must read, we must study, we must discuss, we must make up our own minds as to where we think education is going and then we must act. We're beyond the stage of blissfully sitting in an office with the door closed, cogitating about what we would like to do, dealing with the individuals that are sent to us from unhappy teachers, hasseling them and sending them back into the same situations they came from. The time to act is now. If we do not act now, we will be looking at revolution and we all know that revolution is difficult to resolve.

## PUBLICS IN EDUCATION

How do we act? How do we find out where to grab? It is inevitable that we need to listen to our publics. We have at least seven publics that are trying to communicate messages. The first of the publics are the kids and their whole yell may be refined into one single word 'relevance'. They see no great urgency in learning about the vast bits of information on the plight of, perhaps India, the danger of the population explosion, the starvation diets of underdeveloped nations, when they see in their own country, in their own province, and in their own city the danger of being strangled by pollution. They don't see the need for the extensive resources to be spent on the war in Vietnam when they see statistics of high unemployment, of actual need and hunger right here in Canada. They see no real reason to try to fathom the many structured programmes that we attempt to give them. They say that these problems may be solved by a computer if the students know how to attack a problem by bringing about some possible hypotheses which can be tested.

Parents, our second public, are beginning to set priorities. We have told them for years—and they believed us—that education is good for them and for their children. They accept that a well educated country has a higher gross national product. They don't question this. They really don't proclaim the $300.00 or $400.00 that the average home owner pays to education as being exorbitant. It is really a small amount in the total money they contribute in direct or indirect taxation. They want to make decisions about how they're going to spend more money. They know they need to pay tax but they wish to make decisions as to where or how this money is to be spent. We can see this in plebiscites that have been inaugurated in North America generally. The mood of the people is such that they defeat the vast majority of plebiscites requesting more money for education. They are really not saying, "No, we don't want better education." They are really saying, "Here's a chance for me, an insignificant little taxpayer, to say no to somebody about how he is going to spend my money." I can't say 'No!' when it comes to Income Tax time. I can't say 'No!' when I'm paying taxes on liquor, tobacco, automobiles, etc. I can say, 'No!' in this plebiscite thing." This may well be why people are loathe to pass an opportunity to say "no" to somebody.

Our third public comprises the elected members of school boards who consciously attempt to promulgate a system of education that is built upon proven foundations. They reflect the middle class value system which is being attacked by present day culture.

The fourth public is that of the school system administrators. These people are caught. While they see that education must progress, they look at education on a total system basis, and the task becomes even more immense. So they must allow progress at a rate which elected representatives will understand and accept.

Industry, our fifth public, has spent millions and millions of dollars perfecting various technologies which they are using and which we in the schools are just starting to use. Two years ago, a film produced by Philco-Ford Company demonstrated the futuristic technologies which were already out of date. A school as you and I know it today is already obsolete by existing technological standards.

The sixth public consists of the teachers. The teacher is one of two kinds. The first, usually an experienced teacher type who has over the years found a system that worked for him, to get kids through examinations and satisfy the upper middle class society. He wants: "my room, my kids, and let me go about my business." The second kind of teacher is the new breed, experienced or rookie. He is reflecting the same kinds of attitudes and asking the same kinds of questions that our young people are asking. He says, "Let kids learn the kinds of things that they need to learn. Let them explore so that they can become the kinds of individuals who can recognize a problem, attack it and attempt some solutions."

The seventh public is that of your fellow administrators. They, too, have found a system that works for them, and anyone who accepts an innovation too quickly puts them into an uncomfortable situation as they also must venture into the unknown.

## ISSUES AND IMPLICATIONS

If one listens carefully there are three basic problems reflected by the thoughts of all these publics. These three will, if resolved, immediately place our society in a complete and different setting.

The first problem is one of decentralization. If you look carefully at the new School Act, you will see that the government of Alberta has in fact said to a school system; "Here is the length of a school year, and here is the amount of money you may spend in education. Now, hire the kind of people you think you can get to do the best job. Build the buildings you need, and educate." It doesn't say much more than that. Systems are beginning, in varying degrees, to decentralize various specifics to the school administrators. If systems are giving you this right or responsibility, are you going to pass it on to your teachers? Are you going to say to them, "Here are x kids, learn 'em"? Are your teachers going to pass this on to kids? Are they going to say to kids, "Here I am; I am a Social Studies specialist. What are the problems that you would like to talk about and research?" If decentralization is truly to take effect, each of these steps will need to occur. But then comes the crunch. The people in each of the steps will have to accept responsibilities and be accountable for the responsibilities they have been given. Decentralization sounds like a simple desirable situation but it has very serious implications for each and every one of us.

The second major problem which the new School Act exposes to challenge is that of reorganizing the school year. The old ten-month year beginning in September and culminating in June with approximately one month off because of Christmas, Easter and a few assorted other holidays, and with a 9-to-4 day seems not to be sacrosanct any more. It was built upon an agrarian economy. Strangely enough, it didn't fit the agrarian economy 100 years ago, nor 10 years ago. We need to have a serious look at this and I suggest to you that we need to work towards a quarter system where the school will be open twelve months of the year, from eight o'clock in the morning until about ten at night, so students, young and adult, can make full use of the facilities that are available. These schools will need to offer the regular academic type of programmes, but they will also have to offer the leisure types of programmes, such as athletics and crafts, and to be drop-in centres. It can't be programmed by outside agencies but must be programmed to satisfy the needs and desires of the community which it serves. This has very obvious implications. Our whole economy seems to be revolved about those two months of holidays, but does it not seem much more logical to send these kids into the labour market four times a year rather than all at once? Does it not also seem logical that people who wish to update themselves can do so on a three month period from time to time rather than having to give up a whole year's salary in order to upgrade themselves? It is not the usual school policy where agencies use the public facilities to do the kinds of things that it needs done. The Alberta Teachers' Association has completed an exhaustive study on this concept and can be contacted for particulars by those who are interested.

The third message that seems to be emerging from our publics is that we need to reorganize the school structure to one which will be based on collegiality rather than on a line and staff structure that we've known in the past. This, of course, means that our rules will need to change. Decisions will be made by consensus, involving parents, teachers and students. The teachers will then become professional consultants. The parents will become members of the team. If they know what the schools are wanting to do, or need to do, they will become allies. Students will then learn communication and other relevant skills as well as factual knowledge. They will become supportive rather than revolutionary. The principal will do the kinds of things that lead to collegiality and to consensus. His job will be to work with the parents, teachers and students in order to ascertain the goals or the direction to which they feel the schools should be moving. From the base of his professional knowledge he will try to assist them in making the best decisions. The principals will have support staff, as will teachers, to perform those tasks not requiring professional skills. There will be technicians, library assistants, clerks, cafeteria operators and business managers. The principal may then become the true educational leader.

## ACTION AND IMPLEMENTATION

So what do you do now? You start. You start by thinking out your own personal philosophy of what education is and the directions schools should be taking. You are in the very best position to do this because you have all the professional training and the professional institutions at your disposal. Place this into the context of what you hear from your publics. Get the two to meld and then set your priorities. Should you be expending a lot of energies on school dances? Should you be expending time of staff and resources on school athletics? handing out bus tickets? worrying about which students didn't give immediate obedience to which teacher? Or should you be thinking about the issues at hand: decentralizing your power to your professional staff; giving staff direction as to philosophy and not as to what to do and how to do it? Are you going to achieve in your school a true educational philosophy that everyone understands, accepts and works toward. Are you going to implement? Set your priorities and then start.

Find an improvement your staff wishes to implement. It doesn't have to be earth shattering, but it has to be a start. Then sell your idea. Your system's administration has to agree that the idea has merit. Don't forget to bring your students into the final decision. It is not enough that you understand what you are trying to do and why you are trying to do it. Students also have to understand what you are trying to do and why you are trying to do it. Then you have to satisfy the parents. They have to understand what you are doing, and I assure you, with understanding comes participation and support. You need to sell your product. Like any business you need to sell what you product is, how good it is, and you need to show how reasonably priced it is. You have to sell education in general and your school in particular. Then, when the future needs are identified, public support will demand that these needs be satisfied.

You will get public support, for you will have answered its major wants. Since your publics have had a hand in the decision making, they will be supporters. You will have optimized your physical and personnel resources.You will have made better use of technology. And, most important of all, education will have become relevant.

# CURRENT AND FUTURE PROBLEMS OF ALBERTA SCHOOL PRINCIPALS

N. J. CHAMCHUK

## INTRODUCTION

Attempts to obtain a perspective of the future may range from crystal-ball gazing by the person who claims mystic powers, to the fatalism of the person who proclaims that the future has been preordained and that there is no alternative but to experience it. The position adopted for the purposes of this project falls between the two extremes.

### Nature of the future

Three forecasting algorithms have been suggested by some researchers. The first concerns those phenomena which display a causal relation. If known causes produce predictable results, it is only necessary to observe the occurrence of causes to ensure that specific results will be produced. This has been defined as a deterministic process (Ivakhnenko and Lapa, 1967). In the development of problems in school administration, few phenomena are sufficiently simple or adequately researched to permit such definitive analyses.

More commonly, an apparent cause is followed in some instances by one effect, in other instances by other effects. Accordingly, a statistical probability of the sequence of event A being followed by event B can be established, and the subsequent predictions may then be qualified by probability references. The differences between such stochastic processes, and the fully predictable deterministic processes exist because of the unanticipated occurrence of an event by the deliberate choice or by the random chance of an unknown force or agent. Such an event may occur uniquely, in a random sequence, or so infrequently that a pattern leading to stochastic or deterministic causal relations cannot be established.

Thus, the events which we experience may be categorized into those predictable with certainty, predictable with probability, and the unpredictable.

### Timing of the future

The practices implemented in schools may be placed in three arbitrary categories of time: the present instant, the immediate past, and the historical past. The phenomena of the present instant are now being observed, but likely have not been assimilated into the fund of relatable knowledge. The immediate past consists of those experiences which have been acknowledged and can be related to others verbally or by informal writing. The historical past can be described as those phenomena which have been documented in somewhat permanent records.

As illustrated in Diagram I, the periods of time between the "present" and integration of knowledge from present experiences into current practices indicate the time lag of expertise implementation. In utilizing our knowledge of the past to assist in the identification and solution of anticipated or existing problems, we appear to depend mostly upon our formal knoweldge and to a lesser extent upon experiences integrated into memory. Thus the gap between projected solutions to anticipated problems represents a time lag even greater than that between the aggregate of our experiences and the body of formalized knowledge. Educational practice has been criticized by some as demonstrating a lag of twenty to fifty years behind research.

It would seem desirable to reduce the time lag between the development of a problem and the integration of its solution into general administrative practice. Published books appear to represent a time lag of two to five years behind established research, periodicals a lag of up to two years and conferences a lag of six to nine months. Informal discussions may represent lags from several days to several weeks. It is not suggested that the contributions from such sources are irrelevant, but they must be acknowledged as being dated and to some extent obsolete.

### Frequency for recognition

Related to the timing of the phenomena are the frequencies of occurrence. The "random" incident may be sufficiently infrequent to escape notice or to make its pattern and influence difficult to distinguish. As the incident occurs more frequently,

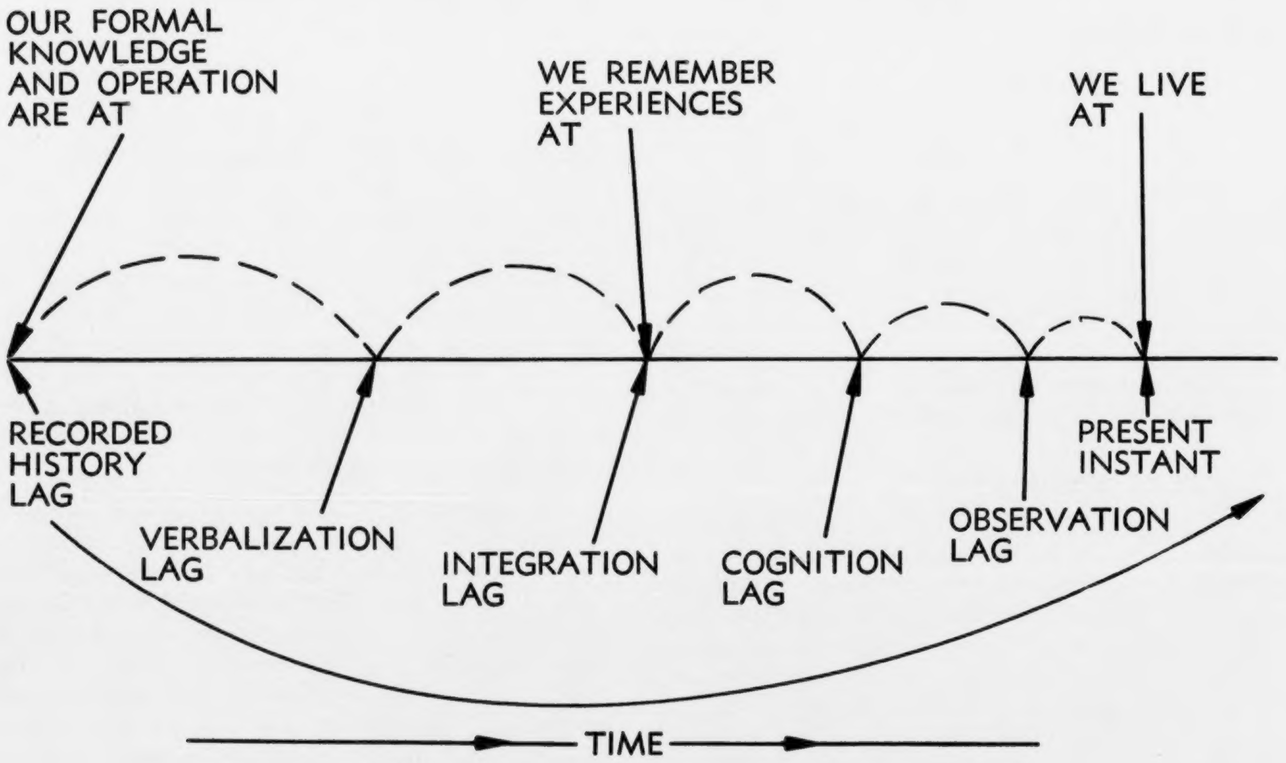

Diagram 1
EXPERIENCE OVER TIME

it may be noticed by enough people to warrant the label of stochastic "trend". When the occurrences are in sufficient proportion they are recognized as deterministic practices or are acknowledged as general problems.

A problem parallel to that of reducing lag time for integration of experience is that of increasing lead time between the identification of a problem and the necessity for its resolution. It is assumed that the longer the time available for resolution of a problem, the better the opportunity to develop a solution or to control the problem at a less critical level.

**Summary**

The future can be fractioned into three exclusive but interactive parts: deterministic, based on predictable cause-effect relationships; stochastic, based on relations whose causality is not well-defined but to which an empirical probability can be assigned; and random, occurring spontaneously by chance.

Much of what will be commonly associated with the future is already happening now, infrequently and without general recognition. The bases for many other developments are rooted in existing phenomena Some of the future developments may be affected by the choice exercised by intelligent humans to force the occurrence of a particular phenomenon or to control the extent of occurrence. Thus, it is proposed that man is capable of increasing his control of future development.

## THE DELPHI METHOD

The Delphi method has been utilized by members of the RAND Corporation for optimizing the opinions and judgments of experts on matters for which objective data cannot otherwise be gathered—usually on future forecasting. Round-table conferences of experts have been criticized as repressing creative and constructive ideas because of the deference of some members to others who have the loudest voices, who have public status and prestige, who voice publicly acceptable positions, or who ride the majority bandwagon. (Helmer, 1967; Cyphert & Gant, 1970).

The Delphi method attempts to eliminate the disadvantages of the conference by maintaining the anonymity of the members and by according each member's ideas equal weighting. Thus, every "expert" has the opportunity to speak, to be listened to, and to have his arguments considered.

The method was originally used to identify military problems in the U.S.A. as early as 1952. Its procedures were declassified and published in the mid-1960's. Basically, the procedure involves four steps:

1. pose a problem and ask for a probable solution date;
2. compile the responses of experts and feed the information back to them asking for a second opinion;
3. request those who maintained extreme positions for reasons supporting their positions, and feed the information from one extreme to the opposite extreme group, asking for revisions or reasons for discounting opposing positions;
4. feed arguments and information back to all participants and request a new revision of estimates.

The process may be continued until the selected experts reach general agreement or reduce the estimates to some acceptable or useful range.

The modification in the present project was to use the experts to identify problems, rank the problems according to importance, and project the dates of general occurrence and anticipated solution. Because of time limitations feedback was restricted to one review.

## PROCEDURES OF THE PROJECT

Tre purpose of the project was to attempt to identify those problems which Alberta principals perceived as being serious at the current time and during the next thirty years.

The invitation to participate was sent to a stratified random sample of 113 principals, and subsequently extended to the members of the 1970 Leadership Course for School Principals. This group comprised the "experts" in identification of problems in administration for school principals.

### Responses to Part I

Principals were asked to "please list as concisely as possible those questions which you consider may present formidable obstacles to the advancement of education in your school at the present time and/or during the next thirty years."

Responses to Part I were received from 26 of the selected sample of 113 principals and from 17 of the 62 members of the Leadership Course. As responses were received, the listed problems were categorized into six topics relating to students, finance, facilities, public interaction, curriculum (content), and instruction (method and teacher techniques).

Original responses were combined into the items which were returned to participants as Part II for weighted priority rankings and for time interval estimates.

Original responses, such as,

> "When and how do we really start teaching the individual, whole child?"
>
> "Individualized instruction—it seems that the pendulum has swung too far in this direction. We can't follow with the funds and staff available."
>
> "The development of a curriculum that will fit the student best seems to be a problem presently and it will continue to extend itself into the future."
>
> "Curriculum is still geared to university entrance . . ."

became components of item "1" of Curriculum—

> "Individualization of programs (e.g. I.P.I.) will provide a major solution to the diverse requirements of students."

Parts of other items related to Finance, Instruction and other topics.

Although concern was experienced over the low proportion of responses from those invited to participate, it was observed that later submissions became somewhat repetitive. It was assumed that most of the problems had been included in the responses received.

### Responses to Part II

Part II was sent to the 113 selected principals and to the members of the Leadership Course early in June. Fifty-five complete and usable responses were tabulated from the 76 received in time to be used. Fifteen other responses were received too late for inclusion in this report.

## REPORT OF THE FINDINGS

### Processing

Raw scores for items were converted to decimal equivalents and the mean score for each item was computed. Topics and items were ranked in decreasing order according to the priority values assigned by principals.

Time intervals were graphed according to cumulative frequency distributions of the time of incidence and solution to each problem.

Since most principals checked the category "Fairly Certain" for their estimates, no additional weightings were given for the certainty factor.

### Interpretation

The following pages report weighted rankings for the topics and for items within each topic. The sum of values for each page equals 1000 (with some deviations due to rounding). Thus a value of 250 may be interpreted as giving that item one quarter of the total importance of items on that topic, and interpreted as being five times as important as an item with a value of 50.

The frequency of identification that a problem exists by a particular point in time is reported numerically. In general, most problems were identified as existing to a large extent at the present time and becoming universal within the next decade. In comparison, few of the respondents perceived the existence of present time solutions to the problems, but many anticipated that solutions would be found within the next decade or two. For most items, a few individuals indicated that the item poses no problem. Similarly, some could not foresee a solution, indicating a perpetual problem.

## RESULTS AND COMMENTS

### Ranking of Topics (Table I)

The ranking of topics from Instruction (relating generally to teaching performance), Curriculum, Student Personnel (student interaction and problems) to Public Communication (including relations with the school board and community), seemed to be a reflection of concern about the interna of the teaching process and in decreasing priority to external and impersonal facets. It may be noted that facilities, equipment, and material shortages were not deemed to be serious handicaps to continued successful school operation, and that financial restrictions appear not to have become an area of major concern as yet.

TABLE I
RANKING AND TIMING OF TOPICS

| Mean Priority Value | | Item | Time | Problem Development | Solution |
|---|---|---|---|---|---|
| 246 | 1. | Instruction | 1970 | 40 | 1 |
| | | | 1980 | 13 | 13 |
| | | | 1990 | — | 10 |
| | | | 2000 | — | 13 |
| | | | Never | 1 | 17 |
| 209 | 2. | Curriculum | 1970 | 43 | 1 |
| | | | 1980 | 12 | 15 |
| | | | 1990 | — | 15 |
| | | | 2000 | 1 | 11 |
| | | | Never | — | 13 |
| 167 | 3. | Student Personnel | 1970 | 34 | 0 |
| | | | 1980 | 18 | 16 |
| | | | 1990 | 1 | 14 |
| | | | 2000 | — | 11 |
| | | | Never | 1 | 13 |
| 148 | 4. | Public Communication | 1970 | 39 | 1 |
| | | | 1980 | 12 | 18 |
| | | | 1990 | 1 | 12 |
| | | | 2000 | — | 13 |
| | | | Never | 1 | 9 |
| 131 | 5. | Facilities, Equipment, Materials | 1970 | 41 | 1 |
| | | | 1980 | 13 | 15 |
| | | | 1990 | — | 20 |
| | | | 2000 | — | 9 |
| | | | Never | — | 10 |
| 98 | 6. | Finance | 1970 | 46 | 2 |
| | | | 1980 | 9 | 14 |
| | | | 1990 | — | 11 |
| | | | 2000 | — | 8 |
| | | | Never | — | 20 |

**Instructional Problems** (Table II)

In assessing the last and first ranked items of this topic, it would appear that principals considered their staffs well trained and prepared to cope with problems, with deficiency of non-instructional job time posing the major barrier to progress. The role of principals to facilitate change was emphasized (item 2) but developments and application of evaluative criteria were accorded low status. (item 6). The desire for greater selectivity in staffing, and for improvement in interpersonal interaction between teachers and associated groups received recognition. The aspiration that open climate school societies would become successful and popular did not receive more than marginal favor.

TABLE II

RANKING AND TIMING OF INSTRUCTIONAL PROBLEMS

| Mean Priority Value | | Item | Time | Problem | |
|---|---|---|---|---|---|
| | | | | Development | Solution |
| 210 | 1. | Teachers will be required to spend substantially increased proportions of time in individual and cooperative planning, group development of innovations, and field research relevant to their schools. | 1970 | 32 | 1 |
| | | | 1980 | 20 | 15 |
| | | | 1990 | 2 | 11 |
| | | | 2000 | — | 19 |
| | | | Never | 1 | 9 |
| 170 | 2. | A major role of principals will be to assist teachers to cope with successive rapid changes and to anticipate future roles. | 1970 | 34 | 1 |
| | | | 1980 | 16 | 17 |
| | | | 1990 | 2 | 10 |
| | | | 2000 | — | 15 |
| | | | Never | 2 | 11 |
| 154 | 3. | Provisions will have to be made to permit considerable selectivity in the quality and specialization of staff according to unique needs of particular schools or projects. | 1970 | 34 | 1 |
| | | | 1980 | 21 | 16 |
| | | | 1990 | — | 16 |
| | | | 2000 | — | 13 |
| | | | Never | — | 9 |
| 140 | 4. | Teachers will require special training in interaction skills to facilitate communication with students, peers, administrative support staff, and the public. | 1970 | 30 | 3 |
| | | | 1980 | 22 | 8 |
| | | | 1990 | 1 | 14 |
| | | | 2000 | — | 19 |
| | | | Never | 1 | 11 |
| 122 | 5. | Teacher authority and the disciplinary climate will be replaced by harmonious coexistence in open climate school societies. | 1970 | 19 | 1 |
| | | | 1980 | 19 | 5 |
| | | | 1990 | 5 | 10 |
| | | | 2000 | 1 | 16 |
| | | | Never | 11 | 21 |
| 120 | 6. | Criteria for the evaluation of competence of teachers and administrators must be determined so that effective developmental activities can be programmed. | 1970 | 29 | 1 |
| | | | 1980 | 17 | 11 |
| | | | 1990 | 3 | 14 |
| | | | 2000 | — | 11 |
| | | | Never | 5 | 17 |
| 81 | 7. | A substantially increased amount of time and resources needs to be provided for professional development of teachers to increase knowledge, technology, and awareness of functions of schools. | 1970 | 39 | 1 |
| | | | 1980 | 13 | 17 |
| | | | 1990 | — | 9 |
| | | | 2000 | — | 14 |
| | | | Never | 1 | 12 |

## Curriculum Problems (Table III)

Individualization of programs to meet the needs of students, and greater teacher adjustment of stock curricula to meet local requirements were perceived to hold greater promise than centralization, or implementation of kindergartens. Little consideration appeared to be offered for obsolete schools or schools with decreasing enrolments, which were relegated to the lower end of the priorities in this topic.

TABLE III
RANKING AND TIMING OF CURRICULUM PROBLEMS

| Mean Priority Value | | Item | Time | Problem | |
|---|---|---|---|---|---|
| | | | | Development | Solution |
| 202 | 1. | Individualization of programs (e.g. I.P.I.) will provide a major solution to the diverse requirements of students. | 1970 | 14 | 1 |
| | | | 1980 | 35 | 8 |
| | | | 1990 | 2 | 17 |
| | | | 2000 | — | 16 |
| | | | Never | 2 | 11 |
| 183 | 2. | Curricula for students will become effective only when local teachers make considerable adaptations to meet the requirements of local circumstances. | 1970 | 15 | 2 |
| | | | 1980 | 35 | 11 |
| | | | 1990 | 2 | 10 |
| | | | 2000 | — | 19 |
| | | | Never | 3 | 13 |
| 150 | 3. | Acknowledgement by parents, school staffs, and communities that centralization of schools provides the basic solution to the inadequacies of small schools. | 1970 | 17 | 0 |
| | | | 1980 | 31 | 12 |
| | | | 1990 | — | 27 |
| | | | 2000 | — | 4 |
| | | | Never | 7 | 12 |
| 144 | 4. | A significant number of educational problems can be overcome by introducing formal education to children at an earlier age through kindergartens and pre-schools. | 1970 | 14 | 3 |
| | | | 1980 | 31 | 13 |
| | | | 1990 | 2 | 13 |
| | | | 2000 | — | 10 |
| | | | Never | 8 | 6 |
| 137 | 5. | Obsolete schools (e.g. in the "inner city" or with dwindling rural populations) require improvement by special staff, programs and curricula. | 1970 | 19 | 2 |
| | | | 1980 | 29 | 14 |
| | | | 1990 | — | 16 |
| | | | 2000 | — | 6 |
| | | | Never | 4 | 14 |
| 101 | 6. | Organization of schools to effectively use specialized staff becomes very difficult because enrolments have been reduced by centralization of some students away from present schools or reduced by rural-urban population mobility. | 1970 | 27 | 2 |
| | | | 1980 | 25 | 16 |
| | | | 1990 | — | 17 |
| | | | 2000 | — | 9 |
| | | | Never | 2 | 10 |
| 83 | 7. | The small school with decreasing enrolment becomes obsolete because it cannot provide increasing diversity of programs to accommodate needs of students. | 1970 | 33 | 2 |
| | | | 1980 | 15 | 17 |
| | | | 1990 | 1 | 17 |
| | | | 2000 | 1 | 6 |
| | | | Never | 4 | 12 |

### **Student Personnel** (Table IV)

Problems related to student interaction and communication were given third priority following Instruction and Curriculum. The specific items concerning development of effective communication skills by students, and increased involvement with staff and administration were given the two highest priorities. Paradoxically, items suggesting the need for greater stimulation of students and suggesting that student participation was disruptive were among the lowest priorities. Problems associated with family transiency or with emotional disruption of students received third priority and may suggest that students are experiencing more frequent interruptions to a stable educational environment. The projection that the "open climate" school would resolve most interaction problems received only median priority. The submission that rural children are in greater need than urban children for future orientation appeared to be discarded by placement of that item last on the list.

TABLE IV
RANKING AND TIMING OF STUDENT PERSONNEL PROBLEMS

| Mean Priority Value | | Item | Time | Problem | |
|---|---|---|---|---|---|
| | | | | Development | Solution |
| 201 | 1. | Students will require programs to develop effective communication and interaction skills to enable compatible participation in society. | 1970 | 36 | 1 |
| | | | 1980 | 19 | 15 |
| | | | 1990 | 2 | 17 |
| | | | 2000 | — | 10 |
| | | | Never | — | 12 |
| 191 | 2. | Communication among students, staff, and administration requires constructive increase and improvement. | 1970 | 39 | 1 |
| | | | 1980 | 15 | 21 |
| | | | 1990 | 1 | 11 |
| | | | 2000 | — | 11 |
| | | | Never | — | 11 |
| 165 | 3. | Problems of family transiency and emotional dislocation of students require appreciable school effort and attention. | 1970 | 43 | 1 |
| | | | 1980 | 11 | 15 |
| | | | 1990 | — | 5 |
| | | | 2000 | — | 10 |
| | | | Never | 1 | 24 |
| 142 | 4. | The 'open climate' school will develop qualities of leadership, self-discipline, and responsibility in students better than will conventional patterns of teacher authority. | 1970 | 21 | 2 |
| | | | 1980 | 31 | 14 |
| | | | 1990 | 2 | 15 |
| | | | 2000 | — | 17 |
| | | | Never | 1 | 7 |
| 120 | 5. | Students require stimulation to participate actively in self-government in their school society and in school administration and planning. | 1970 | 38 | 2 |
| | | | 1980 | 15 | 21 |
| | | | 1990 | 1 | 13 |
| | | | 2000 | — | 9 |
| | | | Never | 1 | 11 |
| 116 | 6. | Student dissent and demands for change require a great part of the energy, time, and skills of staff and administration. | 1970 | 29 | 2 |
| | | | 1980 | 24 | 22 |
| | | | 1990 | — | 11 |
| | | | 2000 | — | 6 |
| | | | Never | 2 | 14 |
| 63 | 7. | Rural children require greater orientation towards the requirements and opportunities of future societies. | 1970 | 40 | 1 |
| | | | 1980 | 11 | 19 |
| | | | 1990 | — | 15 |
| | | | 2000 | — | 12 |
| | | | Never | 3 | 17 |

### **Public Communication** (Table V)

The need for school boards to become better informed of current developments (and perhaps then to be less inhibitant of change) was given top priority by principals, and was followed by concern over unanticipated consequences of the new Act Respecting Public and Separate Schools (effective in Alberta in August 1970). A concern for increased communication within the "Establishment"—teachers, boards, Department of Education—received third priority, and closely paralleled the concern that the materialistic philosophy of contemporary society was in some conflict with attempts to develop or maintain a humane school society. Parents and communities were not seen as a factor inhibiting change for school improvement. Neither was any desire expressed to foster greater community or interest group involvement.

### **Facilities, Equipment, Materials** (Table VI)

Shortage of facilities, equipment, and materials did not appear to be a serious problem for school principals although some concern was expressed over inequities of distribution between larger and smaller systems. Similarly, it would not appear that obsolescence of materials currently in use was a problem.

### **Financial Problems** (Table VII)

Interestingly, the statement that a shortage of financial resources exists was given lowest priority on the list of financially oriented items. Greatest concern was given to implications of smaller staffs and increased work loads, and continuation of relatively lower priorities for elementary education than for secondary and remedial programs. Principals predicted that Boards would remain limited to governmental financial guidelines rather than explore alternative avenues for the acquisition of public funds, but teacher participation in budgeting and allocation of resources received only median priority. Principals did not appear to perceive that financial restrictions would unduly inhibit further implementation of technology and paraprofessional assistance, or introduction and expansion of programs.

### Summary

The ranking of topics leads to an inference that principals are most concerned about problems immediately related to school instruction, and that priorities decrease as the habitat of the problem gets further away from the school. The low ranking of items dealing with professional development of staff, development of criteria for evaluation of administrative effectiveness, and for participation by parent and community groups suggest that principals feel competent to cope with problems as they develop, and are little interested in sharing decision-making with their direct and indirect clients. The general impression of the prediction for the future was maintenance of the status quo with incremental but not revolutionary change.

Time intervals for problems appeared sufficiently similar to conclude that all problems exist to some extent (and have existed in the past) and will continue in the future, but that solutions will be developed "in due course".

## FUTURE DIRECTIONS

Although limited opportunities for feedback and the large sample of participants provided technical problems for thorough exploration of the Delphi process, it would appear that the technique can successfully be implemented to assist group involvement in problem identification and solution. As with any other technique, it is not intended to replace the eventual decision-maker who must intuitively weigh evidence and alternatives to make the final interpretations and subsequent judgment.

### Problems

Five problems become apparent in the administration of the project. First, although the items submitted as problems were judged to be repetitive towards the cut-off date for receipt, the proportion of invited respondents actually participating was disappointly low. Second, the investigator experienced considerable frustration in attempts to analyze submissions to establish the specific nature of problems—the contributing factors, the problems, and the anticipated detrimental consequences if a solution was not found and implemented. Similar apprehension was felt when attempts were made to express the problems in some standard format. As a result, the items which were synthesized and distributed for ranking and timing ranged from descriptions of situations to expressions of desirable future action, highly value-laden speculations of undesirable consequences, and subjective judgments.

## TABLE V
## RANKING AND TIMING OF PUBLIC COMMUNICATION PROBLEMS

| Mean Priority Value | | Item | Time | Problem | |
|---|---|---|---|---|---|
| | | | | Development | Solution |
| 201 | 1. | Boards must become better informed of contemporary developments in educational practise. | 1970 | 48 | 4 |
| | | | 1980 | 7 | 19 |
| | | | 1990 | — | 15 |
| | | | 2000 | — | 6 |
| | | | Never | — | 11 |
| 171 | 2. | The unanticipated consequences of implementation of the new Act Respecting Public and Separate School wil create critical situations. | 1970 | 32 | 2 |
| | | | 1980 | 14 | 31 |
| | | | 1990 | 1 | 7 |
| | | | 2000 | — | 4 |
| | | | Never | 6 | 9 |
| 169 | 3. | Communication between the teachers, boards, and the Department of Education must be increased. | 1970 | 45 | 2 |
| | | | 1980 | 9 | 20 |
| | | | 1990 | — | 12 |
| | | | 2000 | — | 16 |
| | | | Never | 1 | 5 |
| 166 | 4. | The dehumanizing effect of the materialistic culture will seriously inhibit efforts to humanize school society. | 1970 | 48 | 4 |
| | | | 1980 | 7 | 19 |
| | | | 1990 | — | 15 |
| | | | 2000 | — | 6 |
| | | | Never | — | 11 |
| 117 | 5. | The resistance of parents and communities provides a serious barrier to implementation of feasible and practical innovations for the improvement of schools. | 1970 | 39 | 2 |
| | | | 1980 | 13 | 11 |
| | | | 1990 | — | 11 |
| | | | 2000 | — | 12 |
| | | | Never | 3 | 19 |
| 93 | 6. | Public involvement in school administration at the school level is required but becomes very difficult because of pluralistic values. | 1970 | 32 | 1 |
| | | | 1980 | 17 | 10 |
| | | | 1990 | 1 | 11 |
| | | | 2000 | — | 13 |
| | | | Never | 4 | 19 |
| 82 | 7. | Interaction between the school and interested community groups needs to be increased and improved. | 1970 | 40 | 2 |
| | | | 1980 | 14 | 16 |
| | | | 1990 | — | 13 |
| | | | 2000 | — | 9 |
| | | | Never | 1 | 15 |

## TABLE VI
## RANKING AND TIMING OF FACILITIES PROBLEM

| Priority Mean Value* | | Item | Time | Problem | |
|---|---|---|---|---|---|
| | | | | Development | Solution |
| 181 | 1. | Small and/or separate systems do not have facilities, equipment, or materials comparable to larger and/or public systems. | 1970 | 46 | 1 |
| | | | 1980 | 7 | 10 |
| | | | 1990 | 1 | 15 |
| | | | 2000 | — | 6 |
| | | | Never | 1 | 23 |
| 138 | 2. | There is a shortage of facilities (adequate gymnasium, paved playing areas) and equipment (overheads, T.V., duplicators, etc.). | 1970 | 43 | 2 |
| | | | 1980 | 10 | 23 |
| | | | 1990 | — | 10 |
| | | | 2000 | 1 | 17 |
| | | | Never | 1 | 13 |
| 131 | 3. | Living facilities in rural areas are not sufficiently attractive to retain quality staff. | 1970 | 44 | 4 |
| | | | 1980 | 7 | 12 |
| | | | 1990 | — | 11 |
| | | | 2000 | — | 7 |
| | | | Never | 3 | 20 |
| 113 | 4. | Existing facilities are rapidly becoming obsolete because curriculum changes are not accompanied by a corresponding supply of facilities, equipment and materials. | 1970 | 40 | 1 |
| | | | 1980 | 14 | 14 |
| | | | 1990 | 1 | 21 |
| | | | 2000 | — | 4 |
| | | | Never | — | 15 |

*Since there were only four items in this topic, the mean values were adjusted to retain comparability to items reported under other topics.

TABLE VII
RANKING AND TIMING OF FINANCIAL PROBLEMS

| Mean Priority Value | | Item | Time | Problem Development | Solution |
|---|---|---|---|---|---|
| 177 | 1. | With a shortage of finances, professional staff will tend to decrease, and work loads increase. | 1970 | 42 | 1 |
| | | | 1980 | 11 | 28 |
| | | | 1990 | — | 15 |
| | | | 2000 | — | 6 |
| | | | Never | 3 | 5 |
| 164 | 2. | With a shortage of finances, the low priority given to spending in elementary programs will drop further in comparison to secondary and remedial programs. | 1970 | 33 | 4 |
| | | | 1980 | 16 | 14 |
| | | | 1990 | — | 8 |
| | | | 2000 | — | 5 |
| | | | Never | 6 | 14 |
| 154 | 3. | With a shortage of finances, Boards will curtail spending rather than risk plebiscites. | 1970 | 45 | 3 |
| | | | 1980 | 10 | 26 |
| | | | 1990 | — | 11 |
| | | | 2000 | — | 6 |
| | | | Never | — | 9 |
| 147 | 4. | Teaching staff is not involved sufficiently in budget setting and allocation, leading to inefficient practises and low teacher morale. | 1970 | 33 | 4 |
| | | | 1980 | 16 | 24 |
| | | | 1990 | — | 8 |
| | | | 2000 | — | 5 |
| | | | Never | 6 | 14 |
| 143 | 5. | With a shortage of finances, necessary technology and paraprofessional assistance will be inadequately supplied. | 1970 | 38 | 3 |
| | | | 1980 | 17 | 19 |
| | | | 1990 | — | 18 |
| | | | 2000 | — | 7 |
| | | | Never | — | 8 |
| 134 | 6. | With a shortage of finances existing programs (e.g. guidance) will be limited and new programs (e.g. bilingual instruction) curtailed. | 1970 | 42 | 3 |
| | | | 1980 | 12 | 14 |
| | | | 1990 | — | 10 |
| | | | 2000 | — | 7 |
| | | | Never | 1 | 11 |
| 80 | 7. | There is a shortage of financial resources. | 1970 | 48 | 4 |
| | | | 1980 | 7 | 14 |
| | | | 1990 | — | 5 |
| | | | 2000 | — | 7 |
| | | | Never | — | 25 |

Third, the use of means to express concensus or ranking greatly decreased the amount of information reported. Frequency histograms, quartiles, and inter-quartile ranges have been used by some investigators, and were computed in this project but were not reported. The advantages of means over medians, quartiles, or other expressions of distribution of responses appear to have not yet been established by researchers.

Fourth, the comprehensive range of problems likely added to the difficulty in handling data. It may be that requests for statements of problems on selected topics from subsamples of the participants would have been more productive.

Fifth, whether factors such as little time to devote to identification of basic problems, little practise and therefore limited skills in such exercises, overwhelming numbers of similar requests for participation in "research", or general lack of confidence and interest in such projects may have biased the nature, ranking, and timing of problems has not been established.

## Prospects

The project reported here could be continued in several directions. Additional refinement of problems through continued feedback may identify specific common problems in school operation which could subsequently become the foci for conventional research. Exploration of specific issues to determine causal factors and documentation of subsequent consequences could assist in the identification of causal or sequential relations in operational school administration. Replication of such studies could provide the basis for longitudinal projection of deficiencies in school administration. Synthesis of submissions from principals who have resolved such problems might assist in the establishment of suggested guidelines for administrative action by dissemination of successful expertise. At least, the implementation of the Delphi procedure on an existing controversial problem might provide a constructive beginning for participatory communication among affected parties without the destructive effects of hostility that could develop in a round-table confrontation.

The Delphi procedure appears to be adopted increasingly in subjective problem-solving. It remains to the future to establish its worth.

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